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UNIVERSITY OF CAPE TOWN

FACULTY OF HUMANITIES

**ACTION RESEARCH IN TEACHER EDUCATION: THE CASE
OF THE NATIONAL UNIVERSITY OF LESOTHO B. Ed.
PROGRAMME**

A minor-dissertation presented in partial fulfilment
of the requirements for the degree of M. Ed. (Teaching)

By

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February 2002

DECLARATION

I hereby declare that this thesis is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Signed by candidate

Bonane Motebang

May, 2002

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I would like to express my sincere appreciation to my supervisor, Prof. Chris Breen, for his patience in critiquing and providing guidance in this work. Secondly, my sincere thanks to the interviewees for their co-operation and insightful answers they gave during the administration of the interview questions.

University of Cape Town

ABSTRACT

The purpose of this study was to examine the environment of action research project in the National University of Lesotho B.Ed. teacher education programme. The intention was to identify factors that facilitate or impede action research at the teacher education institution where student teachers are prepared for the project to be undertaken in schools during teaching practice. The study also sought to understand the student teachers' and teacher educators' perceptions and experiences of the action research project.

The core assumption of action research is that it improves practice through the development of teachers' reflective skills. It is argued though that conditions in teacher education programmes are not favourable to action research. Thus, some scholars indicate that the full potential of action research can only be realised if teachers reflect critically on social and institutional factors that circumscribe their practices.

The study adopted a qualitative research approach. The case studied was the NUL B.Ed. teacher education programme. The 2000/01 B.Ed. student teachers and the teacher educators in the Language and Social Education department were interviewed. Four action research projects completed by these students were also selected and analysed.

The findings revealed lack of understanding of the research approach by the students and an inadequate preparation for the research project. Although it was found that the school environment was favourable, to a certain extent, to students' research activities the teaching practice on the other hand revealed a behaviourist orientation that impacted negatively on the students' research project.

TABLE OF CONTENTS

1.	INTRODUCTION	1
1.1	The setting for the research	1
1.2	The B.Ed. programme	3
1.3	Teaching practice	4
1.4	Own experience with the above	7
1.5	The problem and the focus of this research	12
1.6	Significance of the study	14
2.	REVIEW OF RELATED LITERATURE	15
2.1	Action research	15
2.2	Action research in teacher education	17
2.3	Some research findings	21
2.4	Teacher professionalism and empowerment	26
2.5	Development of critical reflection in action research	29
2.6	Taking stock	38
3.	RESEARCH DESIGN	40
3.1	Case study approach	40
	3.1.1 Generalizability.....	43
3.2	Methods of collecting data.....	43
	3.2.1 Interviews	43
	3.2.2 Documentation	45
3.3	Target population and sample	45
	3.3.1 Interviews with student teachers	47
	3.3.2 Interviews with teacher educators	48
	3.3.3 Reliability	49
3.4	Analysis of data	49
3.5	Presentation of the findings	50
4.	ANALYSIS AND INTERPRETATION OF DATA	51
4.1	Sample details	51
	4.1.1 Student teachers	51
	4.1.2 Teacher educators	52
4.2	Action Research at NUL Faculty of Education	52
	4.2.1 Understanding of action research by students and staff	52
	4.2.2 Courses offering teaching on action research	56
	4.2.3 How action research is taught	58
4.3	The LASED action research project	61
	4.3.1 Teaching practice structure	61
	4.3.2 The role of teaching practice on action research project	63
	4.3.3 Role of teacher educators regarding the project on teaching practice	67
	4.3.4 role of teacher-tutor regarding the action research on teaching practice	68
4.4	The Teaching practice environment	70
	4.4.1 School curriculum decision-making processes	70
	4.4.2 Factors influencing decisions on teaching/learning activities	72
	4.4.3 Factors influencing decisions on assessment	74

	4.4.4 School organisational features	75
4.5	The Action research product	79
	4.5.1 Questions asked	79
	4.5.2 Format	82
	4.5.3 Common features	83
	4.5.4 Understanding of the action research and evidence of reflective practice	85
5.	DISCUSSION OF THE RESULTS	87
5.1	Student teachers' and teacher educators' perceptions and experience of action research	87
5.2	Factors facilitating or impeding the success of the action research on teaching practice	89
	5.2.1 A constructivists' view of knowledge	89
	5.2.2 Degree of researcher's freedom in schools	93
	5.2.3 Development of reflective practice	95
6.	CONCLUSIONS AND RECOMMENDATIONS	99
6.1	Conclusions	99
6.2	Recommendations	102

Chapter 1

Introduction

The topic for this dissertation arose out of the researcher's own experiences as an assistant lecturer in Business Education (B.Ed.) in the Faculty of Education at the National University of Lesotho from 1991 to 1998. The intention was to research one of the programmes offered by the University. In particular, the research focused on an aspect of the final year teaching practice in the B.Ed. degree as experienced by both students and university staff. Before expanding on these, it is necessary to sketch some of the background details so that the research can be placed in an appropriate context.

1.1 The Setting for the research

The National University of Lesotho is the only university in Lesotho and it offers part-time and full-time degree programmes. The University has faculties, which include Faculties of Agriculture, Law, Education, Humanities, Science and Social Sciences. Each faculty has departments through which it runs programmes offered in that faculty. In addition to faculties the University institutes also participate by offering some programmes in collaboration with some of the faculties.

The faculty departments offer courses that make up the curriculum of programmes they are responsible for. However, the curriculum of some programmes comprises courses not only outside the departments running the programmes but, even outside the home faculties of such departments. Thus the departments also offer courses for programmes in other departments within the home faculty or across faculties. Furthermore, there are some courses that, although housed in one particular department, are run by two or more faculty departments so that they become the responsibility of the whole faculty. Examples illustrating the structure of such courses include teaching practice in the Faculty of Education, which will be explained later.

The researcher's interest is in one of the four-year Teaching Degrees offered by the Faculty of Education. It is, therefore, necessary to elaborate on the teaching practice

as a course offered within these programmes. Before going into the details of the nature of such a course a brief outline of the Faculty of Education is needed to provide a background to the analysis of the course.

The Faculty of Education has three departments. These are the Department of Educational Foundations (EDF), Department of Language and Social Education (LASED) and Department of Science Education (SCE). The EDF Department is responsible for conducting general courses in Education for the various programmes offered in the Faculty. On the other hand the LASED and the SCE Departments are responsible for methods courses in specialised areas according to the programmes of the Faculty.

The Faculty offers undergraduate and graduate programmes in education. Some of the programmes include: Diploma in Education, Diploma in Science Education, and Diploma in Agriculture Education, Bachelor of Education (B.Ed.), Bachelor of Science Education (B.Sc.Ed), Post-Graduate Certificate in Education (PGCE) and M.Ed degree programmes. In the case of B.Ed two programmes are offered. These are B.Ed. secondary teaching and B.Ed. primary teaching. The primary teaching degree is a part-time programme offered in collaboration with the Institute of Education.

As has already been indicated, the University through the Faculty is the only institution that offers part-time and full-time studies aimed at degree programmes in education. As such it is the main source of professionally qualified teachers, especially secondary and high school teachers in the country. Thus, the Students' Handbook specifications of the Faculty's responsibilities within the country's education system include:

- Preparing graduate teachers for the Lesotho secondary schools by offering both undergraduate and graduate courses of study through full-time and part-time programmes.
- Preparing non-graduate specialist teachers for the Primary and Secondary schools through full-time and part-time programmes (Faculty of Education – Students' Handbook 1996/97:18).

The Faculty fulfils this responsibility through its three departments. However, the programmes designed for secondary teacher preparation are the direct responsibility of the LASED and SCE Departments. The Department of SCE is responsible for the B.Sc.Ed. while LASED is responsible for B.Ed. (Faculty of Education – Students' Handbook 1996/97). As already indicated the EDF Department offers major core courses in these two degree programmes. In addition the Faculty depends on other faculties for courses contributing towards content of the student teachers' teaching subjects. Thus various departments within these faculties offer courses towards the curriculum of the Faculty's degree programmes.

In the case of B.Sc.Ed., the programme is offered jointly by the Faculty of Education with the Faculty of Science (Faculty of Education – Students' Handbook 1996/97:13). The Faculty of Science offers courses that contribute towards the curriculum that makes up the students' teaching subjects. For B.Ed. (Secondary-Teaching) the Faculty relies on the Faculty of Humanities and the Faculty of Social Sciences for content courses. This study examines a component of this B.Ed. programme offered in the LASED Department.

1.2 The B.Ed. programme

The B.Ed. is a four-year degree programme designed for students intending to teach subjects in humanities and social sciences at secondary and high schools levels. Thus, the two faculties mentioned in the above paragraph support the Faculty of Education with courses that contribute towards content of the students' teaching subjects (TS). Each student is expected to major in at least two teaching subjects. In years 1 and 2 students take two subject content areas in the faculties, that is, Humanities and Social Sciences, plus a compulsory core Educational Foundations Courses (EFCs). In year 3, they complete the content in the other faculties.

In year 4, the students take LASED courses for their subject methods as well as electives. The Department, therefore, offers the subject methods or curriculum studies courses (CSCs) in subject specialisations in the areas already indicated. Each student is expected to take two subject methods courses since the programme requires a major in at least two teaching subjects (Faculty of Education – Students Handbook,

1996/97:11). These courses are offered during the first semester of the last year of study in the programme, which is fourth year.

The second semester, usually referred to as eighth semester, is devoted to teaching practice. The major in two teaching subjects also requires experience in both teaching subject specialisations for each student. Table 1.0 below illustrates the structure of the programme and the contributions of the various departments and the faculties.

The NUL B.Ed. Curriculum (Table 1.0)

Semesters	Year 1	Year 2	Year 3	Year 4
Semester 1	EDF – EFCs FOH – TS1 FSS – TS2 ↓	EDF – EFCs FOH – TS1 FSS – TS2 ↓	FOH – TS1 FSS – TS2 Electives ↓	LASED – CSC1 LASED – CSC2 Electives
Semester 2				FED – TP 1 FED – TP 2

Notes: TS = Teaching Subject
CSC = Curriculum Studies Course
EDF = Department of Educational Foundations
EFC = Educational Foundation Course
FED = Faculty of Education
FOH = Faculty of Humanities
FSS = Faculty of Social Sciences
TP = Teaching Practice

The TS have been numbered 1 or 2 just to indicate that each student is expected to major in at least two teaching subjects. These may be taken from one faculty. The arrows in the year one to year three columns illustrate that the contributions of the faculties and the EDF department continue into the second semester. The programme is made up of eight semesters. Thus, the TP is usually referred to as eighth semester teaching practice.

1.3 Teaching practice

The administration of the teaching practice is the responsibility of all the departments in the Faculty, that is, EDF, LASED and SCE. The placement of students and organisation of the teaching practice is administered by the teaching practice committee made up of representatives from three Faculty departments and a teaching practice co-ordinator. The co-ordinating role rotates around the departments. The

supervision and assessment of students on teaching practice is also the responsibility of the whole Faculty. The teaching practice lasts for a continuous period of eight weeks. During this period, students are expected to be in schools carrying out the full responsibility of teaching of the allocated classes. Each student is expected to carry a minimum of seven periods a week per teaching subject (Faculty of Education – Teaching Practice Handbook 2001).

Supervision of the teaching practice involves, among other things, observations of the students' lessons by the lecturers from the three departments. The regular teachers whose class lessons have been allocated to the students, usually referred to as tutors, are also expected to participate in this regard (Faculty of Education - Teaching Practice Handbook 2001). The Faculty views the teaching practice as an opportunity for students to learn from practice. A lot of emphasis is placed on the importance of the observations for the development of reflective skills. The handbook specifies:

Reflecting on these experiences (classroom practice) is the most important learning opportunity for the student teacher. It is the professional task of the teaching practice tutor and the Faculty of Education staff to assist the student teacher with this, so that s/he can **become a reflective teacher** and continue to grow professionally even after his/her pre-service courses (Faculty of Education - Teaching Practice Handbook 2001:4).

The handbook also indicates the importance of the pre-observation meeting between the student and the observer, who may be the University lecturers or tutors. It is indicated that the two should discuss and agree on the focus of the observation and **“how the agreed-on focus will be observed and recorded”** (Faculty of Education - Teaching Practice Handbook 2001:4). For classroom observation it is suggested that the observer could use the “agreed-on instrument only” (my emphasis). The importance of post-observation meeting is highlighted, with an indication that discussion after the observation involves counselling by the observer which as suggested helps the student to:

- a. Identify possible problems,
- b. To investigate the origins of the problem, to search for information to solve the problem ...
- c. Develop multiple solutions and select the most appropriate approach,
- d. Encourage trying out such a solution and to find ways to evaluate its outcomes (Faculty of Education - Teaching Practice Handbook 2001:4).

As has already been explained, the procedure is suggested as a way of helping the students to reflect on their practices. As it will be shown below assessment of the teaching practice requires that the students submit their lesson plans with self-evaluation of these lessons.

Assessment of teaching practice is based on three components indicated on the LASED teaching practice mark record as, teaching practice file (TPF), teaching practice assessment and project report (see Appendix A). The teaching practice file comprises, a minimum of twenty lessons per subject taught and the self-evaluation for each of the lessons (Faculty of Education - Teaching Practice Handbook, 2001:18). The teaching practice assessment refers to the assessment of the students' classroom lessons (LA) by the university lecturers (see Appendix B).

In relation to the third item of the teaching practice assessment, the handbook specifies that for LASED students: "assessment consists of lesson observations, teaching practice file... and Action Research Report" (Faculty of Education - Teaching Practice Handbook, 2001:18). Lastly, the guidelines include an outline of the report format with a section on methodology that specifies in the heading of the section: "Methodology (Action Research-oriented)". Thus, a third component of the teaching practice assessed for B.Ed. students is the action research project (ARP). Figure. 1.0 below illustrates this process.

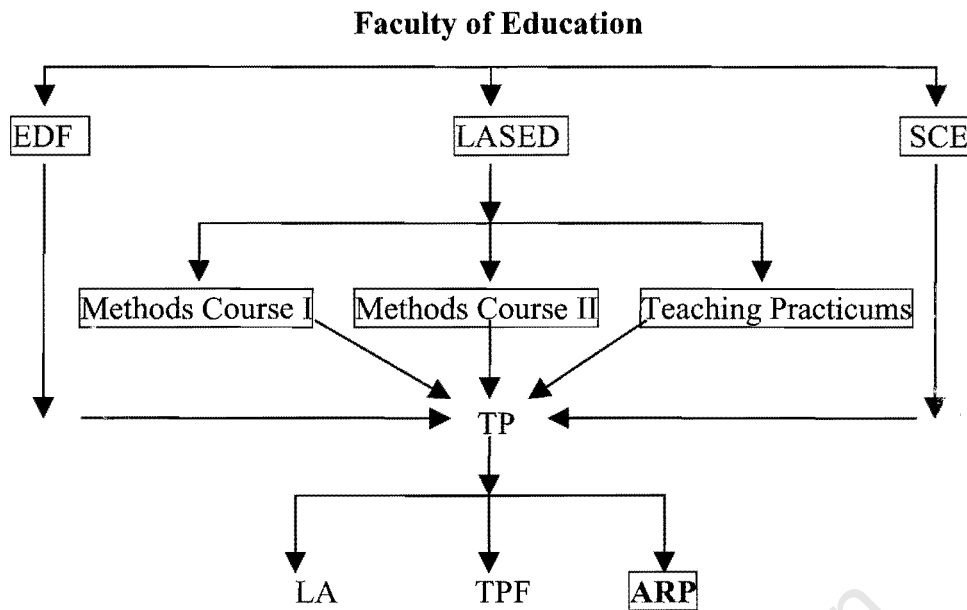


Figure 1.0

The focus of this study is on the action research project that the B.Ed. students are expected to conduct during teaching practice. It is, therefore, necessary to conclude this section with a brief explanation of the project report. The project is described as a school-based action research project for each teaching subject from which the students select their majors. This is the project they are to conduct during teaching practice (Faculty of Education – Students Handbook, 1996/97:27-32). The students are, therefore, expected to conduct an action research project per teaching subject, the teaching practice guidelines show that each student is “expected to write two project reports, one in each of (their) teaching subjects” (Faculty of Education - Teaching Practice Handbook, 2001:18). Furthermore, the guidelines include specifications of areas from which the students can select a topic for the action research and it is stated that: “each report must be based on a problem/task/experience that you encountered during your teaching in the relevant subject area” (Faculty of Education - Teaching Practice Handbook, 2001:18).

1.4 Own experience with the above

My interest in the action research project arises from my experiences in the supervision of teaching practice. Supervision of the teaching practice included observation of students’ lessons using the lesson observation forms with three structural foci, good points, points for future attention and general remarks (see

Appendix B). Each student is expected to have at least three university supervisors' observations before the assessment of the teaching practice, which usually begins on the sixth week of the practice period (Faculty of Education – Teaching Practice Handbook 2001). For assessment of the teaching practice an assessment instrument schedule with a list of skills and activities students are expected to perform is used (see Appendix C).

In the case of the action research the supervision of the students' research activities applied mainly to my Business Education students. Business Education is one of the units in the LASED Department. I still had discussions on the project with other students though because they are free to consult any supervisor about problems encountered in their research. The supervision of the Business Education students' research activities was based on clinical supervision model with its three phases, the planning conference, classroom observation and the feedback conference as suggested by Acheson and Gall (1980). In accordance with the model the students were expected to lead discussions during the first and the last phases of the model. The planning conference, as specified in the teaching practice handbook, provided a guideline for the observation and even for the evaluation of the lesson. To help the students reflect on their lessons, during the feedback conference, we used an instrument with three questions guiding the evaluation. This is explained in the paragraphs that follow.

I will introduce my experience in the supervision with a summary of my participation in activities preparing the students for the practice. It is hoped that this will shed some light on some of the difficulties I encountered in the supervision of the teaching practice. The activities involved a one-day seminar organised for the students before they left campus and Business Education teaching practicums.

I attended seminars organised by the teaching practice committee for the students before they left for teaching practice. This is usually held on a Friday of their last week on campus. All members of the Faculty attend the seminar. Various Faculty members selected by the committee present different issues covering different aspects of the teaching practice. Issues highlighted included students' behaviour on teaching practice, in relation to professional ethics. In a way this was a reiteration of

instructions in the teaching practice handbook, and consisted of Faculty expectations on how the students are to relate with the teachers in school and learners and their participation in all school activities. One of the sessions covered the action research project, basically a summary of what the LASED Department expected the student to include in the project (For details of the summary see Appendix D).

Business Education activities included teaching practicums in the form of peer teaching and micro-teaching. The purpose of the teaching practicums was to help students develop reflective skills through evaluation of their lesson presentations. The evaluations centred on three questions that were meant to guide the analysis of the lessons. For purposes of this study I will refer to the questions as self-evaluation guide. The three questions were concerned with, description of what went on in each stage of the lesson plan, providing a rationale for one's actions and how the presenter intends to resolve issues arising from the evaluative discussions. The students' analysis had to cover both negative and positive points for each question per stage of the lesson plan. The stages involved introduction, development and conclusion. Each student, therefore, presented the self-evaluations for critique to fellow students in the presence of the lecturer. However, it is important to note that my participation in such activities was with the business education group only, whereas supervision of the teaching practice concerned all the students on teaching practice.

My experience with the business education students indicated that the peer teaching activities were not effective in developing their reflective skills. Identification of the area of concern, namely what is to be the focus of the observation, proved to be difficult. The students were not specific on what they would like to be observed on. Usually they expressed their concerns in general terms like the focus should be on, 'everything'. I also encountered difficulties with the post-observations conferences. Discussions at such conferences revealed their lack of analytical and reflective skills, despite the detailed framework used to guide the evaluations involving the three questions to be addressed at each stage of the lesson plan. Comments such as, "the lesson went well because I achieved all the objectives or it was bad because I was nervous or anxious" were common among students.

The students' failure to address the questions as intended led to a practice whereby providing them with the list of your own observations, teaching practice observation forms (Appendix C), became the best option. The students, also, seemed to be more comfortable with this strategy than the one that required them to evaluate their own lessons. Part of the researcher's interest in this study arises from the inability to help students with the problems they encountered with the research. Perhaps lack of understanding of the practice of action research in teacher education may have contributed to the failure.

The most difficult task for the students seemed to be with the write-up. For business education, the students were expected to compile the individual lesson evaluations into weekly summary evaluations, which would be incorporated into the project as part of a section on analysis and interpretation of the results. In addition the lesson plans and the self-evaluations formed part of the appendix section of the project. However, most of the reports were vague and shallow not reflecting detailed weekly summaries. Some students explained that it was difficult to reflect on their lessons.

Other students in other subject specialisations also expressed problems with the write-up of the report. They indicated that they were not sure of what was required, that is, the Department's expectation in relation to the project. Most of them also indicated difficulties with the selection of a topic, especially one that would be approved by their lecturers. It is difficult to know who is responsible for preparation of students or how they are prepared for the teaching practice. My own experience with the business education students meant that other groups had different expectations and skills. Even the business education students struggled with the teaching practice tasks. They struggled with both the evaluation of their own lessons and the project report.

The Department of LASED also expressed dissatisfaction with the final product the students submitted. Members within the Department complained that most of the projects were of poor quality with superficial students' classroom experiences (Minutes of The LASED Department - 1996). A one-day seminar workshop was organised for the department in which action research was presented and discussed. The end product of the workshop was a guideline to be used by members in their

preparation of the students for action research. The move, however, did not solve the problem as students still expressed their frustrations with the action research.

I found the students' enquiries about what they should write disturbing. I realised that the frustrations for most students seemed to be writing about their own experiences. Most students did not consider their actual classroom experiences, and perhaps their intuitive knowledge, as authentic material for the project. The impression one forms from readings about action research is that a teacher education programme that has an element of action research values personal construction of knowledge and knowledge gained from practice. It is, therefore, important to establish the extent to which the NUL teacher education programme is supportive of this stance. It is hoped that studying action research will contribute to knowledge about the research and illuminate the environmental factors affecting the students' research activities.

The second reason for undertaking this research arises from the criticism that has been leveled against teaching practice by other faculties. Because of the teaching practice, the students cannot take any courses offered during the eighth semester. This has been contested by other faculties offering courses for the students' teaching subject content. The basis for opposition is that the semester could have been allocated for more content course offerings to strengthen the students' content knowledge (Faculty of Humanities - 1996). The Faculties suggest a Post Graduate Certificate/Diploma in Education, which would allow the prospective teachers to concentrate in teaching subjects only, during the first four years of their studies (Faculty of Humanities - 1996). However, according to a Study Commission on Teaching Practice the government rejected this suggestion on the grounds that it was expensive in terms of time and finance (Otaala, Daniels and Mohapeloa, 1986).

The Faculty of Education, on the other hand, has offered more space and time to the other faculties at second and third year levels, while it adjusts its own courses to fit within the first semester of the fourth year. Stuart (1987) observes that "Pre-service students spend two-thirds of their time studying chosen subjects", and that, little time is, therefore, left for the Faculty of Education. Despite the controversy surrounding the teaching practice no research has been carried out to establish the extent to which the action research course is feasible, appropriate or effective. It seems necessary to

find out how the preparation of students for the research has been accommodated within such stringent conditions.

Lastly, declining standards of education in the country have also been partly blamed on teachers. Khati (1993) quotes the Basotholand Congress Party's election manifesto, which shows that the quality of education directly depends on the quality of the teaching force and also that education gathers momentum from teacher education. The author, however, notes with disappointment that: "The public and the school system wonder at the calibre of the crop of teachers produced at the National Teachers Training College and the National University of Lesotho" (Khati 1993:3), as the only two teacher training institutions. On the other hand literature points to action research as an aspect of teacher education that has potential to improve practice. It is, therefore, essential to establish the extent to which the environment surrounding the NUL teacher education programme is supportive of the Faculty's attempt to improve practice through the introduction of action research.

1.5 The Problem and the focus of this research

The emphasis the Faculty of Education places on the teaching practice requires a critical analysis of the worth of such courses in teacher education. Indeed literature supports such moves that highlight the importance of practice in the development of student teachers' professional knowledge. Teaching practice is valued for the opportunity it affords students to learn from practice and to strengthen their theoretical understanding. However, as the NUL teaching practice handbook shows, effectiveness of the learning depends on the students' ability to reflect on their practice (Faculty of Education - Teaching Practice Handbook, 2001:18). Goodman (1991) agrees, but warns that the most difficult task is that of involving the students in assignments that help them experience the relationship between reflection and learning from teaching practice. Some theorists have recommended action research for assignments that would highlight the relationship (Stevenson 1991). Action research undertaken during internships has, therefore, been introduced in some teacher education programmes for the purposes of enabling students to develop reflective skills. This places teaching practice at the heart of pre-service teacher

education, and action research can be a useful means to enhance learning from field experiences and developing reflective practitioners.

However, literature also criticises institutional set-up on the basis that it constrains students' research activities in programmes incorporating enquiry-based courses. For instance, some scholars have questioned the degree of control and autonomy that teachers as professionals have over curriculum matters in schools (Avalos 1997, McCulloch, Helsby and Knight 2000). The scholars argue that the control of curriculum lies with powers external to the schools, like examination boards, teacher-proof curriculum packages and others. This raises a dilemma in teacher education as it means that, teachers' ability and capacity to exercise their professional judgement in matters concerning their work is restricted. Groundwater-Smith (1988) also argues that programme structures and their requirements defeat the purposes for which courses like action research are designed for.

Other scholars have also highlighted factors contributing to the success or failure of the introduction of an action research undertaken on teaching practice (Graves 1990, Stevenson 1991). These include issues such as how action research is understood and taught at institutions running such teacher education programmes; the extent to which action research is incorporated into the teaching practice; and the extent to which the students see the project as a written assessment task rather than a means to deepen the teaching practice experience. In addition students' freedom to explore their own agenda of enquiry in schools has been questioned. Issues related to institutional structures such as, timetable, class size and curriculum have been raised as restrictive of the freedom (McKernan 1991). Lastly the extent to which students are aware of inhibiting and facilitating factors in the institutional set-up is equally considered as one of the contributing factors.

These raise a number of questions for a study of action research at NUL. The value of teaching practice and the extent to which students gain from it needs to be examined. Also the Faculty's emphasis on the importance of reflective teaching and claims by literature that action research develops students reflective skills raise more concerns. There is a need to investigate the way in which action research is taught at NUL, and what the perceptions are of the LASED staff members and their students. It is against

this background that the researcher has undertaken to examine the environment in which action research is taught and practised at NUL. There is a need to find the extent to which the contextual factors at the University and in placement schools are supportive of the teaching practice experience and assignments that the students are being asked to undertake. In order to answer the issues the scope of this dissertation is narrowed down into the following two specific research questions.

How are action research and the action research project perceived and experienced by the students and teacher educators at NUL?

What are the factors which, facilitate or impede the success of the action research project on teaching practice?

In order to answer these questions related literature has been reviewed to guide the study in identifying issues, which need to be addressed in the formulation of data collection instruments. The next section, therefore, covers a brief theoretical background to action research and a bit of theory of institutional structures and teachers as autonomous professionals. Some review of relevant studies on action research is also included.

1.5 Significance of the study

As already stated no research has been carried out to investigate the effectiveness of action research at NUL or even the conditions in which it has been introduced. It is hoped that this research will illuminate contextual factors that encourage action research and those that need to be attended to in order to ensure a greater impact of it on the nation's education. Also it is hoped that through this study it will be possible to determine whether the teacher education programme encourages reflective teaching. This is important as it may have some implications on the type of teachers the University prepares for the country. I also hope that carrying out this study will enable me to gain more insight and a deeper understanding of the issues surrounding action research in teacher education and in education as a whole. The research is, therefore, of professional value to me as it impacts directly on my work.

Chapter 2

Review of Related Literature

The literature reviewed in this chapter covers research studies conducted on the use of action research in teacher education programmes. The focus of the review is on studies covering the relationship between action research and development of reflective practice and how institutional structures mediate this relationship. The intention is to study the impact of action research on student teachers' reflective practice skills. It is hoped that the studies will reveal the nature of institutional structures in education and how this impacts on the daily practices of the practitioner. In particular the arrangement of the daily school routine, in the practising site for student teachers and the organisation and administration of the programmes into which the student teachers get registered will be studied. In addition some literature on teacher professionalism and empowerment will be examined as it is under these concepts that the teacher's autonomy and control of curriculum are discussed.

Before presentation of the literature it may be useful to discuss action research and incorporation of action research in teacher education programmes.

2.1 Action research

Action research is a form of research that combines action with research. This form of research is participatory in the sense that the practitioner researches his/her own practice, thus, being a practitioner as well as a researcher at the same time. It is also argued that action research is also collaborative as participants under investigation are to be involved in every stage of the action research circle (Kemmis 1988).

Kemmis (1988) traces the origin of action research to Kurt Lewin, an American social psychologist, who proposed that solving social problems involved a way through which social practice is merged with the experimental approach of social science. Kemmis (1988) interprets Lewin's model, which he explains consisted of analysis, fact-finding, conceptualisation, planning, execution, more fact-finding or evaluation, and a repetition of this whole circle of activities. Hopkins (1985) and McNiff (1988) identified the activities from Kemmis' model and summarised them into four stages

that involve planning, acting, observing and reflecting. Since reflection is also concerned with evaluation of the whole process, the subsequent step to this reflection involves re-planning, so that the process ends at the starting point, resulting in a cyclic movement. The re-planning in turn results in repetition of the whole process that leads to another cycle.

Action research has, therefore, been described as a spiral of cyclic steps (McNiff 1988). The diagram by McNiff (1988:23) below illustrates this pattern of a series of successive cycles.

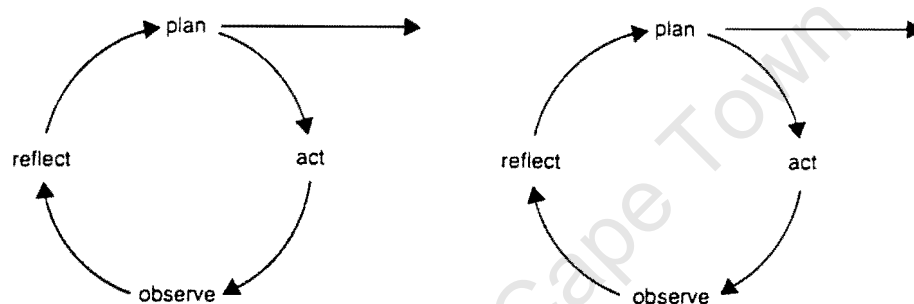


Figure 2.1

Most authors also acknowledge the importance of reconnaissance in the whole process. Hopkins (1985) quotes Elliot, who in his critique of a model of action research proposed by Kemmis, argues that reconnaissance involves both fact finding and analysis and that it should recur throughout the spiralling activities not at the beginning only. However, in his criticism of Elliot, Hopkins (1985) quotes Ebbutt who argues that:

The Kemmis diagram clearly shows reconnaissance to comprise discussing, negotiating, exploring opportunities, assessing possibilities and examining constraints – in short there are elements of analysis in the Kemmis notion of reconnaissance (Ebbutt in Hopkins 1985:35).

Thus the process is not only spiral, but incorporates reflection, a detailed evaluative analysis of the situation. It also involves the possibility of immediate feedback and instantaneous decision making within and between the cycles. A definition that captures the essential features of action research and perhaps as McNiff (1988) observes the most widely accepted definition is one suggested by Kemmis. Action research is defined as:

... a form of self-reflective enquiry undertaken by participants in social (including educational) situations in order to improve the rationality and justice of (a) their own social or educational practices, (b) their understanding of these practices, and (c) the situations in which the practices are carried out (Carr and Kemmis in McNiff 1988:2).

As the definition shows, reflexivity lies at heart of action research, which explains the association of the research strategy with the development of reflective skills, as scholars like Stevenson (1991:3) have argued: "Action research provides a means of facilitating practitioners' systematic reflection on educational practices."

In addition, since the aim of the research is to help one to understand his/her practices and the rationality of the practices, the understanding ultimately inspires the practitioner to improve his/her practice. Kemmis (1988) explains that since Lewin's model referred specifically to a program of social action: "the action researcher becomes involved in creating change ... in the real world of social practice." He concludes that the intention in action research is to affect social practice as well as to understand it. Hopkins (1985:32) confirms with: "it is action disciplined by enquiry, a personal attempt at understanding whilst engaged in a process of improvement and reform." In education action research attracted a great deal of interest and support because of its potential to contribute to teachers' professional development thereby resulting in change in schools (Webb 1990). Proponents of action research such as Stenhouse (1975) have argued that change in schools belongs to a teacher through a study of her/his work, a study which, as already indicated requires self-reflective practice.

2.2 Action Research in Teacher Education

In teacher education reflexivity is seen as an opportunity for the student teachers to reflect on and question their own beliefs and assumptions about teaching and learning process. Some educationists argue that teachers tend to teach as they were taught not as they are taught to teach (Chin 1997, Fosnot 1996). In order to change the tendency Fosnot (1996) suggests a structure of a teacher education programme such that:

...(it) begin(s) with these traditional beliefs and subsequently challenge them through activity, reflection, and discourse in both coursework and field work throughout the duration of the program. ... Further, field experiences need to allow for investigation and experimentation in child development, learning, and teaching ... (Fosnot 1996:206).

Graves also emphasised the importance of field work in creating opportunities for student teachers to reflect on their beliefs about the teaching/learning process. Teaching practice and learning by doing are at the core of the curriculum of teacher education programmes that emphasised reflective practice as Graves writes:

This means that teaching practice should be the central aspect of the course from which students can learn by reflection-in-action, aided by competent practitioners (the teachers in schools and lecturers concerned with professional practice) (Graves 1990:63).

Goodman (1991) also explains that in response to the criticism of teacher education programmes that emphasised technical proficiency of their graduates student teachers have been encouraged to inquire into the merits of their practices. The author indicates that most of these inquiry approaches have centred around the field experiences of preservice teachers and adds:

Using avenues such as seminars groups, supervisory conferences and action research assignments, preservice teachers are encouraged to seriously reflect upon their practicum experiences (Goodman 1991:56).

The essence of the argument is that student teachers should be encouraged to reflect on and challenge their beliefs about the teaching/learning process. The role of field work in creating opportunities for this purpose cannot be overemphasised (Graves 1990, Goodman 1991). However, as both authors show reflection is not automatic. There must be assignments or activities that encourage development of reflective practice. As Goodman (1991) suggests avenues that can be explored for this purpose are many and action research is one of them.

It is argued therefore that action research in pre-service education creates an opportunity for teachers to reflect on their traditional beliefs and develop reflective skills as well (Lederman and Niess 1997, Stevenson 1991). Lederman and Niess

(1997) argue that action research is becoming a critical component of preservice education. The authors observe that:

Such research projects, it is believed, facilitate the development of reflective practitioners who systematically learn about pedagogy and make professional decisions through continuing inquiry (Lederman and Niess 1997:397).

A list of assumptions about action research drawn by Stevenson (1991) also includes: “Action research provides a means of facilitating practitioners’ systematic reflection on educational practices” (Stevenson 1991:279).

Graves (1990) elaborates on this point by tracing the origin of action research in teacher education to a movement that developed from and embraced Schön’s idea that one can develop in students a capability for reflection-in-action but one cannot tell them how to teach. The idea is found to be common among those who view professional knowledge as artistry in which technical rationality may not be effective.

The view is developed further to show that it involves a shift from an objectivist’s to constructivist’s view of practice (Graves 1990). A deeper analysis of the assumptions of the reflexivity process supports Grave’s (1990) assertion. Reflexivity involves questioning and challenging one’s beliefs about pedagogy in the light of effects of one’s action in a real classroom situation. It assumed that the process will result in shifts in pedagogical beliefs hence acquisition of new ideas about the teaching/learning process. Similarly constructivists’ view to knowledge emphasise engaging learners with phenomena and then working to understand the sense they are making of those phenomena instead of telling them what to think. The implication is that understanding the teaching/learning process is itself constructed.

Minnis (2000:3) also illustrates that action research is part of a constructivist approach to teaching and learning. Guilfoyle, Hamilton and Pinnegar (1997) support the view by indicating that probing beliefs, which is reflection, is an important part of social constructivism.

Constructivism is a theory that explains learning as an understanding of a phenomenon through the interaction of what one already knows with the phenomenon. Learners are expected to use their own experiences to construct meaning which makes sense to them, rather than have the meaning delivered to them in an already organised form. Eggen and Kauchak (1998:184) identify the learning process in constructivism as involving learners' active roles, understanding the new in terms of what one already knows and applications of the understandings to authentic situations.

As already shown, it is assumed in teacher education that preservice teachers bring to the classroom beliefs about education that need to be adjusted. The role of the teacher educator according to constructivism is, therefore, to facilitate questioning and examination of beliefs through opportunities that create dilemmas for students. Furthermore, Chin (1997) indicates that the implication for teacher education is that, one cannot tell pre-service teachers what you want them to learn, instead they should be provided with opportunities to experience and make sense of what it is that they are to understand. The content of teacher education is not fixed as the context in which it is applied varies.

However, Richardson (1997) suggests that there are different interpretations and explanations of constructivism. He identifies two positions that illustrate extremes in constructivist approaches, the Piagetian/psychological and the situated social theories. The former refers to a generally accepted assumption of constructivism that meanings or understandings are personally constructed. The role of the teacher is to create an environment that enables the learner to construct meaning for himself/herself (Richardson 1997). The approach is, however, criticised by other theorists because of its failure to address issues of power, authority, the place of knowledge in education and the role of social element in learning. Elaborating on the argument, Richardson (1997) explains that the approach separates the knower from the known, the individual from the social, and thought from action.

In order to address the above weaknesses, social constructivists have proposed alternative theories that place the social at the centre of the construction and appropriation of knowledge. Within this approach Richardson (1997) identifies two

forms, the situated cognition and sociocultural. In the former, knowledge is constructed by the individual through transacting with the environment in which she/he acts. It is also socially constructed because meaning is mediated through language in a social context. Knowledge is, therefore, neither separable “from the activities within which (it) was constructed, nor from the community of people with whom one communicates about ideas” (Richardson 1997:8). The term ‘Sociocultural’ refers to Vygotsky’s conception of constructivism. In this case the development of an individual depends on social interactions, which provide for a where cultural meanings are shared within the group and internalised by the individual.

The above analysis of constructivism is summarised by Chin’s (1997: 121) conceptual framework of constructivism, which identifies knowledge as personally constructed, inherently situated and socially mediated. The framework demonstrates clearly the rationale for enquiry-based courses like action research in teacher education. As such it provides the basis upon which conditions conducive to the success of action research can be examined.

The above discussion presents a brief background to the way in which action research has been viewed in teacher education. It also highlights some of the factors that need to be considered in an analysis of the impact of action research on teachers’ reflective skills. The introduction of action research in teacher education has attracted much research investigating its impact on professional development and improvement of practice.

2.3 Some research findings

A book by Hustler, *et al* (1986) on action research in classroom and schools documents action research studies conducted by different teacher researchers in different school settings. One of the studies, by Street (1986) illustrates the effectiveness of action research in improving mathematics teaching. The researcher undertook the study with a team of tutors at a polytechnic. The aim of the research was to investigate the effectiveness of action research in helping teachers to develop their professional expertise in a course infused with an action research component. In

addition the course is offered within a Masters degree course in the education of young children.

Analysis of the students' reports revealed an improvement in the student teachers' skills in the teaching of mathematics. Comments by the participants illustrate the insights they claimed to have gained:

I have greater understanding of the problems which children have and of the stages of development in maths' and 'I have been looking outward rather than reflecting more on my own performance with a generalised 'model' of what should be achieved rather than where the children actually are (Street 1986:131).

It is clear from the study that the teachers became aware and reflective of their practices.

Similar findings have also been reported by Stuart (1987). The researcher carried out an action research study in collaboration with five teachers in Lesotho. Three of these teachers taught in secondary schools, one in a high school and the fifth in a teacher-training college, whereas the researcher was a teacher trainer at the local university. The study was on the teaching of development studies in Lesotho secondary schools. As stated, the study focused on improving the teachers' "teaching skills ...(and) ... the ability to reflect on and evaluate their own practice and to carry out systematic classroom enquiries" Stuart (1987:3) A summary by the researcher illustrates the findings:

Over the course of the research year the five teacher-researchers became increasingly aware of processes within their classroom, and more able to reflect constructively on their own practice. They all extended their repertoires of teaching methods, and also began to develop research skills, exemplified by the case study reports they wrote and published at the end of the year. (Stuart 1987:4)

The individual research reports by the participants indicate that all the teachers reported that they had become much more aware of how they taught, and more able to evaluate their own practice critically.

In another study focusing on school counselling and guidance similar findings were reported on action research (Ponte 1995). The researcher in this case carried out the study at the Faculty of Education and Pedagogical Science of the Hogeschool van Amsterdam, within a part-time training course for teachers working in schools. Each participant carried out an independent action research project on a selected problem. Evaluation of the course revealed that the objectives of the course to “develop skills of the individual course members and improve school guidance” were reached. An excerpt of a teacher’s script illustrates this: “Teacher A: You notice immediately in your work. You work better. I have had the courage to organise study days for colleagues.” (Ponte 1995:298)

Ron and Wendy (2000) conducted a study exploring the possibility of action research in a pre-service teacher education, Bachelor of Education degree programme. The participants were forty-two students in a one-year post-degree B.Ed. programme. Each of the participants was expected to carry out an action research project during a thirteen-week period of teaching practice. Data was collected from group meetings and individual participant’s interviews were also recorded. In addition the students submitted a journal kept during the teaching practice and the project.

The findings revealed that action research enhanced the student teachers' autonomy while providing collegial support for professional growth. It also improved their practice as a framework for integrating the information the students had learned from various courses. The students also became more observant of the learners' needs and more aware of their classroom practices. Constraints revealed by the study included, time and the intensity of the programme, which overwhelmed students. The researchers conclude with an emphasis on the importance of replacing the teacher training in teacher education programmes with teacher learning, whereby the students are given more responsibility for their own professional growth.

Mayumbelo and Nyambe’s (1999) study on critical inquiry into Namibia’s pre-service teacher education reported similar conclusions. They indicated that all student teachers interviewed perceived a teacher as a reflective practitioner; and their data also revealed the ability among student teachers to analyse and critically reflect on their teaching experiences. Even the consultants for the teacher education reform in

Namibia note that: “Namibia represents a fundamentally different approach to both teacher education and educational development in Africa and much of the third world” (Zeichner and Tabachnick 1999:207).

The findings in these studies illustrate that through action research teachers develop research and reflective skills. The latter skills enable them to become aware of their practices and its effects, thereby resulting in a search for ways of improving their practice. These findings on the impact of action research on teachers’ professional skills are important in guiding the study of the impact of the NUL B.Ed. students’ action research.

Literature, however, indicates that the full potential of action research is based on the teacher’s ability to reflect critically on practice. Webb (1990:1) observes that:

Central to (the) vision of teachers researching their own practice was the belief that the improvement of teaching and learning in schools could best be achieved through the development of the critical and creative powers of individual teachers.

Thus development of reflective skills incorporates a critical aspect. Webb (1990) also quotes Grundy who adds that:

Only emancipatory action research transforms the ways in which practitioners think and act. It does this through requiring them to recognise and understand the historical and social origins of their actions and the consequences that these have for others involved in the schooling process. (Webb 1990:27)

Action research with an emphasis on critical reflection is therefore considered to be liberating, because it encourages independent thinking, experimentation and the use of professional judgement by the teacher. It is predicated on the view that the teacher is an autonomous professional who uses his/her professional judgement in discharging his/her obligations.

However only two of the reported studies cover the critical aspect of the teachers’ developed reflective skills, the others concentrate on professional and research skills. This needs further analysis, as it has been a contested area in the whole debate on the

impact of action research in education. Advocates of critical reflection argue that programme structures in teacher training institutions and the context in schools perpetuate conformity and control. This, it is indicated stifles creativity and any move undertaken by the teachers, inclusive of action research, to mediate change. Hopkins (1985:1) develops the argument further to show that the issue of critical reflection was a reaction against an education system and society that stifled individual initiative and responsibility. The author states that:

Teachers are too often the servants of heads, advisers, researchers, text books, curriculum developers, examination boards, or the Department of Education and Science among others. (Hopkins 1985:3)

He cites projects that incorporated action research in their approaches such as the Humanities Curriculum Project and the Ford Teaching Project as being concerned with emancipation.

Constraints in teacher education on action research have also been discussed at length. Avalos (1997) explains that the institutional structure of teacher training colleges determines the format and content of training programmes and the professional status and autonomy of teacher educators. However, as the author argues, these are not always favourable to models of teacher education based on enquiry-based courses. Some scholars have, therefore, raised concerns that the environment in these institutions is not conducive to action research. Groundwater-Smith (1988) adds that enquiry-based courses are not possible within the confines of award-bearing courses, as in order to meet the institutional demands there is pressure for work to be presented for assessment purposes.

Contextual factors in schools as practising sites and teacher training institutions, and their organisational rules may have a debilitating effect on students' action research. The constraints are expressed in the nature of and the relationship between curriculum content, teaching and learning practices and evaluation systems existing in the educational structures. In addition the power relations between participants in these institutions may also affect action research. Some of the research studies in the next section illustrate the impact of contextual factors on action research.

Before looking into the studies concentrating on critical reflection it is important to look into teacher professionalism as it has been discussed in education. It is important to explore this issue as action research is based on an assumption that teachers' decision-making and practice are guided by their professional judgement.

2.4 Teacher professionalism and empowerment

Issues on teacher professionalism have been raised in discussions on the degree of control and autonomy teachers have on decisions related to curriculum matters and their work in general. Avalos (1997) explores what she calls facilitative structures of teacher professionalism and empowerment, which she argues influence the extent to which teachers may exercise their professional judgement in their work site. She explains that the teacher empowerment is two sided. It may refer to an individual's potential to influence a situation due to knowledge possessed and the capacity to judge how to apply the knowledge or the opportunities afforded an individual to influence situations (Avalos 1997).

The two perspectives from which power is analysed are referred to as facilitative structures, that is, the teacher's disposition to act professionally and the degree of freedom allowed by contextual factors on the work site (Avalos 1997). In the case of pre-service education the students' disposition may be influenced by the training the students undergo. Opportunities afforded to an individual relate to the degree of freedom a student teacher is allowed at the school of placement during teaching practice.

Teacher autonomy and their control over curriculum are concerns which have been raised among educators especially in the area of politics of teacher professionalism. McCulloch, Helsby and Knight (2000) cite the experiences of England and Wales to illustrate that teachers do not have control over school curriculum. The authors argue that even to portray the era of the 40s and 60s, as ones of complete control over curriculum by the teachers, as it has always been argued, is a myth. The authors argue that even then the work of the teachers was still controlled through examinations by examination boards and school council units. They cite, as an example, the experience of the then Modern Secondary Schools, which ultimately became victims of

examinations, although originally they were not to be subjected to external examinations.

The introduction of the National Curriculum in England is also said to have raised a lot of concern (McCulloch *et al.* 2000). The major thrust of the issues raised with the enactment of the National Curriculum rests on the belief that where curriculum is developed centrally by the government the teachers' professional judgement in decision-making is restricted. Other American scholars have criticised the teacher-proof curriculum packages for the same reason (Zeichner and Liston 1987). Dore's (1976) analysis on the limited role teachers have in decision-making in less developed countries, on the other hand, reveals public examinations as the most influential factor.

Young (1976) agrees with Dore (1976) and criticises the view of curriculum as practice as it makes the curriculum an object of the subjective intentions and actions of teachers and pupils. Furthermore, the author argues that it implies that a critical examination of the assumptions underlying teachers' activities will enable the teachers to change, which as he argues is theoretically and practically misleading in:

... locating the possibilities of change in education solely within teachers' practices. (thereby grant teachers) ... a kind of spurious autonomy and independence from the wider contexts of which their activity is a part ... (Young 1976:18).

The author illustrates how examiners outside the school context are involved in sustaining particular notions of school knowledge. As an example he explains how the success in the teaching of science in one school classified under the modern secondary school cluster was frustrated by the assessment system. The assessment allocated more marks to the written factual examinations and only a fraction of the total mark, 15%, to the practical aspect. The author concludes that in locating the possibility of change in teachers' practices, this view contradicts the lived experiences of those with whom it theorises, paradoxically widening the gap between theory and practice.

As indicated Avalos (1997) identifies teacher training as a source of teacher empowerment. The author explains that teacher training is perceived by the politicians and policy-makers as an important factor in determining teacher power. However, she argues that: "The institutional structure of teacher training affects the format and content of training programmes as well as the professional status and autonomy of teacher educator" (Avalos 1997:78).

Drawing from different country contexts the author demonstrates the inadequacy of a one-year post-graduate certificate in education. The inadequacy is explained by the nature of the programmes, whereby the faculties providing the specialised knowledge function in isolation from the concerns of teacher education. Consequently, graduates from such faculties enter teacher training in need of experiences that will enable them to reconstitute their specialised knowledge into more integrated and teachable form (Avalos 1997). The time constraints, however, always limit such a possibility. The isolation includes the faculties of education as it also functions not only in isolation of other faculties, but even from the rest of the educational world outside the universities.

Giroux (1988) explains that one of the threats facing teachers within public schools is the increasing development of instrumental rationality that emphasise a technocratic approach to teacher preparation and classroom pedagogy. A behaviourist orientation, is said to be dominating in the training programmes and emphasis is on mastering subject areas and methods of teaching. Thus:

Instead of learning to reflect upon the principles that structure ... classroom life and practice, prospective teachers are taught methodologies that appear to deny the very need for critical thinking (Giroux 1988:123).

It is also argued that the technocratic and instrumental rationalities extend to the teaching and learning in schools. The criticism of teacher education as technocratic, eclectic and fragmented is important, as it will help us in our analysis of the B.Ed. teacher education model at NUL. The studies that follow illustrate the context in teacher education programmes for the development of the students' ability and capacity to exercise independent, autonomous professional thinking. The section also

covers the impact of school context, as practising sites, on the student teachers' action research undertaken during teaching practice.

2.5 Development of critical reflection in action research

The question of whether action research can lead towards the development of critical reflection was addressed in a study undertaken by Gore and Zeichner (1991) with students in a five-year elementary teacher education programme. As part of the programme the students were expected to complete an action research project carried out during a twenty week teaching practice period.

Eighteen projects completed by student teachers during the 1988/89 academic year were analysed. The analysis was based on the three domains of reflection that the researchers explained was proposed by Van Manen. The domains include technical, practical and critical reflection. The emphasis in the programme is on the latter since its orientation is based on a social reconstructionist view of reflection. The orientation stresses the commitment by the educators to both social justice and an ethic of care, hence the students' attention is drawn toward issues of equity and social justice as they get prepared for action research. The notion of action research as emancipatory becomes an overriding intent of the programme as it covers the individual and the social dimensions of schooling.

Findings revealed that majority of the projects failed to address social and political issues of schooling and as the researchers note: "many students began with a focus on discipline and classroom management unconnected to curriculum and instruction; others ended there from different starting points" Gore and Zeichner (1991:131). Other projects varied from student teacher co-operating teacher relationships, to motivation, textbooks and other topics. The researchers explain that even though analysis of the projects alone may be limited, other researchers studying this aspect of the programme reported similar findings. It is explained that these researchers had conducted interviews in addition to the analysis of the projects.

The researchers observe that even in projects where some aspects of critical rationality were identified, the ability could not be ascribed to action research. They

dispute an assertion that action research itself generates reflective teaching arguing that:

... where reflective teaching was evident, students came into the student teaching experience with dispositions to examine their teaching and the social context, and willing and able to reflect in all three domains of rationality (Gore and Zeichner 1991:125).

Of particular interest in this study is a revelation by some of the student teachers about the student teachers' struggles to gain access and authority in the classroom. Some of the reports quoted indicate that the students were frustrated by an inability to command authority in class as they did not subscribe to or even could not employ the assertive disciplinary measures employed by the co-operating teachers. This is important for this study as it illustrates the vulnerability of the student teachers and their inexperienced status as they struggle for ownership in curriculum matters and classroom practices.

Similar findings were reported in Stevenson's (1991) study at another university. The purpose of the study was to evaluate the effectiveness of action research in developing the practitioner students' critical reflective skills.

Analysis of the data from the questionnaire indicated five ways in which the students benefited from engaging in action research. These included: increased awareness of classroom events and that of external influences and constraints on their teaching, an understanding of research skills, an increased ability to find solutions to problems related to their work and the development of their reflective practices. An analysis of the projects, however, revealed a descriptive account of the students' goals, actions and consequences without a critique of these dimensions of their practices. In the researcher's view it confirmed the students' claims about improved research skills and a better understanding of classroom events, but did not show a development of critical reflective practice.

Of the few projects that the researcher reports as incorporating critical and analytic reflection, critical reflection on organisational structures was still missing. Thus the researcher observes: "... the social or organisational structures that circumscribe the

practitioner students' actions were apparently accepted as given and not made problematic" (Stevenson 1991:80). As an illustration the researcher cites an example of a student practitioner who identified a time constraint imposed by the tenth grade curriculum. The students felt compelled to follow the course syllabus and this in turn fostered an urge to plan actions that would not impinge upon the student's teaching schedule. The researcher, therefore, concludes that the students did not find it necessary to make the identified constraints the subject of inquiry. Rather they decided to confine their decisions to act within the existing constraints.

Several explanations are suggested for the students' reluctance to question the situational arrangements in their professional setting even when they find them restrictive. For instance, the researcher ascribed the students' concern with the technical skills of action research to the structure of the action research course and the way it was taught. The course instructor provided the students with structured guidelines as a way of helping them with the self directed inquiries and the action research projects. In the researcher's view, the technical nature of the guidelines might have created a prescriptive orientation that ran counter to the intent of action research. In addition the problem was compounded by the traditional assessment system found in courses that are awarded grades as: "the practitioner students tended to focus on understanding the process of inquiry and the product that represented the means of reporting the inquiry" (Stevenson 1991:9). Also the researcher reported as problematic the traditional criterion for success in University courses. The criterion is based on students' ability to present in written form their results about the efforts to effect change on their educational practices and *not* on their actual attempts to change. The researchers also observes that:

... the structural constraints that emerged within the course (e.g. time parameters for completing the action research project, the lack of immediate feedback on the progress of one's inquiry), not surprisingly, mirrored the institutional constraints that teachers in general, and these practitioner students in particular, face in school. (Stevenson 1991:10)

Furthermore, it is shown in the study that the constraints imposed by the structure of a university credit-awarding course were not rendered problematic by the course processes, as for example the assessment system was not negotiable. The researcher

also argues that the educational experiences, beliefs and dispositions that practitioner students carry along with them to teacher educational programmes influence their perceptions about the institutional arrangements on their professional settings. The structures are, therefore, taken for granted and are not seen by teachers as sites for reflection.

Stevenson's (1991) study demonstrates students' inability to reflect critically upon issues surrounding their work. It raises important issues of the impact of the University course structure and assessment on students' capacity to reflect. The study also alluded to the impact of time as a factor in relation to the school syllabus on the students' action research. The study, therefore, provide guidelines on areas that need to be investigated in this research.

The following studies were reviewed to find other factors that impact upon development of students' critical reflection through action research.

Liston and Zeichner (1990) reached similar conclusions in a study that was conducted at the University of Wisconsin. The study revealed that although benefits can be reaped from teacher education programmes that recognised the role of the professional teacher and emphasised teacher autonomy in pre-service education there are still some problems to overcome. A major problem identified by the study was that there is a need for institutional support and structure from the University outside the School of Education and also a need to address the problem of concentration of power and authority, especially in invisible centres like testing agencies and textbook publishers.

Noffke and Brennan (1991) also evaluated an action research course run by the supervisors of teaching practice. The student teachers registered in this programme completed an action research project during their final semester of field experiences. The main focus of the action research course was to develop student teachers' critical reflection skills.

Analysis focused on the structure of the course, the students' experiences as reflected in seminar discussions, student teacher supervisor conferences and the students'

completed projects. Other sources of data for the researchers were their reflections on their experiences in running the course, which involved introducing and developing the action research concept and assisting student in developing critical reflection skills during seminars.

Problems that emerged from the discussions of the study reveal that the time factor is one of the constraints for both the educators and the students. Both parties worked under limited time frames at the University, even at the school. The student teachers completed only one cycle of the action research project. Consequently, the supervisors even wonder from the conclusions as to whether they should call this an action research project. Also the researchers argue that the accreditation of the teacher certification programme has its own requirements that are in conflict with the demands of the seminar. For example it is stated that the programme handbook has a list of requirements for the students that include:

keeping journals, writing lesson plans, making three observations of other classrooms, being observed by the university supervisor about six times, three-way conferences between the teacher, student teacher and supervisor, preparing a unit of study, doing two weeks of lead teaching - with major responsibility for all teaching, preparation and assessment, and a weekly seminar (Noffke and Brennan 1991:198).

These, as the study indicates, leave no time for the university-required projects and reading. The students also saw the seminars as a distraction to teaching practice as the primary means of learning how to teach. The conventional grading of the seminar is also perceived as a threat to the relationship between the student and the supervisor. Also the supervisors note that the students did not have control of the classroom as they note:

First, they are in someone else's room. Even at the beginning of the school year, the teacher has set up routines, the curriculum of the school has certain elements of an inexorability which the student only gradually begins to understand in their institutional, teaching and personal dimensions (Noffke and Brennan 1991:198).

It therefore means that it may not be easy for the supervisors to negotiate changes. The researchers conclude that, although action research may develop critical

reflection, there is a need to reconcile the institutional patterns of action with their own democratic intentions if the full potential of action research is to be realised.

Another evaluation study was carried out by Minnis (2000). The action research was evaluated within a postgraduate programme at the Institute of Education, Universiti Brunei Darussalam. The Institute offers programmes at certificate, degree and postgraduate levels in education. Action research features in the taught courses, school-based projects and practices leading to M.Ed. in Educational Management. However, as the author argues, the introduction of action research in the programmes seems to be incompatible with the cultural and political expectations of the teacher's role in this country.

Brunei is explained as a Malay-Islamic monarchy, and that the monarchy has been in power for over 500 years, with the power concentrated in a few hands of the members of the monarchy and their close advisors. Also it is explained that the monarchy controls all the social institutions (Minnis 2000). The author argues that action research cannot flourish in a highly constrained political environment like Brunei. Furthermore it is argued that even if action research is valuable:

given the heavy teaching loads emanating from the pressure to produce more teachers, teacher educators will need to balance the amount of time, energy and follow-up spent on action research with its probable acceptance and ultimate utility in the Brunei classroom (Minnis, 2000:3).

The findings of the research reveal that studies carried out by M.Ed. candidates are narrowly conceived, concentrating only on classroom management and school efficiency issues. Thus: "issues such as organisational and pedagogical effectiveness that lie at the heart of much constructivist discourse in the West is nowhere to be found in Brunei action research" (Minnis, 2000:5). The author attributes this to permission that researchers have to gain from the Ministry of Education before entering a school as the Ministry closely monitors research and dissemination of results.

The studies above identify factors that seem to have impact on students' ability to reflect critically on their practice. Teaching load, time factor and structure of the action research courses and control of education by governments represent significant factors that may need to be investigated in this study.

Similar findings were revealed in a study carried out by Zeichner and Liston (1987). In addition the study identifies as problematic the relationship between the student teacher and the co-operating teacher, the supervision and the supervisor' workloads.

The teacher education programme evaluated is oriented toward reflective teaching, teacher autonomy and increasing democratic participation in decision-making in areas involving educational policy (Zeichner and Liston 1987). Reflective teaching takes place in schools where students are placed for a fifteen-week period of teaching practice. Curricular components of this period involve classroom teaching, attending campus seminars and supervisory conferences, keeping journals and an inquiry-oriented activity that involves completing either an action research project, an ethnographic study or a curriculum analysis project. The programme also encourages collaborative interaction among participants.

It is explained that efforts have been made to work closely with the co-operating school personnel in order to build acceptance of and involvement with inquiry and reflective teaching and yet they still put emphasis on the conventional model of the programme. In addition it is shown that attempts to introduce the concept of reflective teaching in the programme courses and to include quality inquiry and reflection in the criteria for student evaluation together with supervision that encourages these programme goals have also failed. The students and the co-operating teachers consider the time spend on inquiry and reflection as time taken away from more important tasks:

... a time for the 'final' demonstration of previously learned instructional skills together with students' understandable desire to create favorable impressions of their instructional competence in the "here and now" (Zeichner and Liston 1987:41).

The authors point out that the portion of the student teachers' teaching experience in their formal preparation and their socialization to teaching is too small to have any impact on the student teacher's disposition toward the role of teaching and schooling.

Heavy workload of the supervisors was also identified as another factor obstructing the realisation of the programme goals. Consequently, the supervisor-student contact provided for in the programme is inadequate. The researchers attributed the problem to the low status accorded to clinical teacher education within university contexts. However, the authors note as more important than the heavy workloads:

...the lack of formal authority supervisors and students have over the curricular and instructional practices in the student teacher's classroom, (which) inhibit student teachers from raising the kinds of questions about classroom and school routines which the programme seeks to encourage (Zeichner and Liston 1987:42).

Contrary to an attempt by some co-operating teachers to encourage reflective practice, the formal authority relations between the student teachers and the teachers are cited as an obstacle that works against these efforts. In addition the co-operating teachers are not guaranteed full support, as there are no rewards, time arrangements and reduced workloads so that they can provide the student teachers with the required assistance.

The structurally fragmented and ideological eclecticism characteristic of teacher education programmes is also identified as prohibitive. The programme does not provide for a coherent and well co-ordinated effort towards the preparation of reflective practitioners, since each segment is offered and controlled by a different faculty. Conflicting views about the role of a teacher also pose a problem as the researchers argue that the programme's emphasis is on the professional decision-maker while the society and institutions maintain the dominant view of a technician. The researchers indicate that studies analysing educational policies that have been enacted concluded that the effect of the policies is to promote greater control over content, processes and outcomes of teachers' work.

Goodman (1985) undertook an ethnographic study of social control and student teachers' response to institutional constraints. The study explored the student teaching

experiences in a preparation programme that emphasised field-based practices. Data was obtained from interviews and observations. In addition some literature on the teacher education programme of the university was studied. Constant comparison of the data was used in the analysis of the data.

The findings of the study revealed that external forces control the work of the teacher to the extent that the autonomy of the student teachers is restricted. The control mechanisms used were through the manipulation of curriculum, since the students could make little or no input in decisions on matters concerning curriculum. In fulfilment of their degree programme the students were expected to plan and prepare a unit of study to be taught during teaching practice. Of the thirty-seven students asked whether they had ever taught the unit, only three are reported as having responded affirmatively. To fulfil the requirement: "most students either taught a series of lessons directly from the text or at the most made minor revisions/additions" (Goodman 1985:32). Deeper analysis of the interview to find reasons for these practices revealed that: "(1) the co-operating teacher told them what to teach; (2) the lesson was next in line in the textbook; and/or (3) the curriculum was required by the school board" (Goodman 1985:32).

The researcher concludes that most students did not question the rationales that served as the basis for curriculum decisions. Accountability and testing movement are also identified in the study as yet other measures of social control. The study illustrates how the state's "Functional Literacy Exam" dominated the curriculum so that 'reading' and a 'skills' approach to curriculum reflected an emphasis on examinations.

Thus the co-operating teacher and the students stated that: "teaching for the test was the major determinant of curriculum decisions" (Goodman 1985:33). The cited interview below demonstrates the effects of the tests on the student teachers' work:

There were a few 'suggested activities' at the end of the chapter (in the basal reading text) that sounded kind of neat. I asked her (the co-operating teacher) if I could do some of these with the kids, but she told me not to 'waste time'. We had to keep drilling the kids on their skills because the (state) test was coming up soon, and she wanted the kids to do well on it (Goodman 1985:33).

The study also reveals that the public complained whenever pupils failed the tests so that schools were under pressure to increase pupils' scores. As an illustration the researcher cites an example in which pupils' test scores were the second lowest in one particular state. As a result the superintendent and every principal in each school in the state were fired and the teachers put on probation. Goodman (1985) raises another issue of concern in this study, namely that of assessment, especially as a determining factor of a teacher's approach to his/her work. It is important, because, Dore (1976) argues that education in the third world countries is heavily examination oriented.

2.6 Taking stock

Two research questions were posed in chapter one, namely:

How are action research and the action research project perceived and experienced by the students and teacher educators at NUL?

What are the factors which, facilitate or impede the success of the action research project on teaching practice?

This review of the literature has provided several important features against which the NUL experience of action research can be judged. In particular it appears that a critical action research:

- Encourages constructivists' view of knowledge (Minnis 2000, Graves 1990).
- encourages the development of reflective practice (Lederman and Niess 1997, Stevenson 1991).
- requires the researcher to have as much freedom as possible in designing and implementing teaching /learning strategies (Liston and Zeichner 1990, Noffke and Brennan 1991).

These aspects will be revisited in discussing the data resulting from the main research questions. In addition the studies illustrate some of the factors affecting the development of critical reflection in teacher education. Some factors are related to the

programme structure at the institutions of higher learning, while others relate to contextual factors found in schools used as practice sites. This is helpful in guiding the methodology for this research, which will be discussed in the next section.

University of Cape Town

Chapter 3

Research Design

This is a case study of the National University of Lesotho B.Ed. programme. It focuses on action research undertaken by student teachers during teaching practice. The study was designed with an intention to understand the environment in which the students undertake action research. As such, it seeks to understand how the courses covering or involving action research in the programme are structured. It therefore studies the structure of the subject methods courses as it is within these courses that students are prepared for the research. How the teaching practice is organised and run is equally important, as it is during the teaching practice that students undertake to do the research. The environment also includes schools as sites of practice. The latter involves the extent to which the school environment facilitates students' attempt to carry out the action research.

3.1 Case Study Approach

In order to understand the research design we first have to establish what a case study is. Case study is explained as a research strategy that undertakes an in-depth or intensive investigation of a single unit. Scholars highlight that it involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple courses of evidence (Robson 1993, Yin 1989). Stake in McKernan (1991:74) adds that case study is: "The study of a single case or a bounded system, it observes naturalistic and interprets higher order interrelations within the observed data." Gilgun (1994) also emphasise that the defining characteristic is its focus on an individual unit. The unit of study in this research is a school-based action research project, offered within the B.Ed. Programme at National University Lesotho.

The action research project is part of a bigger picture of education courses offered by the Faculty of Education through its three departments. The focus of the study is on the Department of Language and Social Education. As indicated in earlier sections of this study the Department is responsible for the action research project conducted by the students during teaching practice. Gilgun (1994:372) further explains that:

the interaction of the unit of study with its context is a significant part of the investigation ...case studies take multiple perspectives into account and attempt to understand the influences of multilayered social systems as subjects perspectives and behaviours.

The Department offers methods courses within which the students are introduced to action research. How the structure of the courses affects the action research and how the research is infused in such courses are equally important. The action research aspect has to compete with the content of the methods course for the attention and time of both the students and the teacher educators. Thus the interaction between these aspects of the programme and the action research raise issues of significance in this study.

In addition since the teaching practice has its own requirements, in addition to being undertaken in a different context (the schools) it is important to study the impact of this aspects of teaching practice on the action research. As a component of the teaching practice, action research is undertaken by the students while at the same time they focus on school curriculum demands and on fulfilling the teaching practice requirements. It is hoped that a study of the interaction of the action research with these factors will reveal the extent to which the NUL action research project creates an opportunity and space for the development of reflective practice.

Yin (1989) further indicates conditions that must be observed when selecting research strategy. These are outlined as:

- (a) the type of research question posed, (b) the extent of control an investigator has over actual behavioural events, and (c) the degree of focus on contemporary as opposed to historical events (Yin 1989:16).

The author continues to show that case studies are suitable for research questions that focus on the “how” or “why”, especially if the investigation is on contemporary as opposed to historical event and the researcher cannot manipulate variables. Such was found to be the case with this study as an exploratory study that seeks to understand

the interrelationship between the various aspects of action research. McKernan (1991:77) adds that case study: "...is rich in description, interpretation, explanation and narrative, working more for understanding ...". Since the researcher in this study sought to understand with an intention to bring into focus the context in which action research operates, case study provided a suitable research strategy for this purpose.

One of the advantages of case study is that it is flexible in the sense that it can be pre-structured or emergent (Robson 1993). The main purpose in this study is to understand how action research is experienced by the teacher educators and the student teachers at NUL. This suggests an exploratory study. However, as the researcher was working under a very tight time-scale, it was imperative that a pre-structured approach be followed. In addition my experience of the action research at the institution and the literature reviewed suggest a relationship between action research in teacher education and its wider context. The suggested relationship implies a confirmatory study except for an argument that:

The case study need not limit itself to confirmation of suggested relationships ... It could be embedded in a wider study which might throw further light on the relationships, or even suggest alternative views of the phenomenon (Robson 1993:149).

Thus, as the author argues the danger of working with a strong conceptual framework may blind one to important features of the case and, therefore, result in misinterpretation of the evidence. A case study was, therefore, found to be suitable as it allows a continuous process of research design during the study, thereby providing an opportunity to modify and change focus.

As an in-depth investigation, case study can illuminate features and characteristics of the case being studied. It therefore, as Robson (1993) shows, presents a credible and accurate account of the setting and action. McKernan (1991) also adds that it seeks to disclose the milieu, which itself influences an innovation or system. This was found to be the best approach to clarify the phenomenon in question, while at the same time providing a detailed account of how the environment influences the phenomenon.

3.1.1 Generalizability

The major concern in this study is, as explained above, a detailed analysis that explains the phenomenon not generalizability, which is one of the limitations of a case study. Literature shows that findings from case studies cannot be generalised to a larger population. Gilgun (1994) explains that generalising in case studies is analytic, which means that findings extracted from one case study are tested for their generalizability with other cases or patterns predicted by theory. However, she warns that the findings may not fit other cases except those on which the findings were then constructed. Therefore, given the scope of the study it cannot be claimed that the findings of this research are generalisable to a larger population.

3.2 Methods of collecting data

One of the advantages of case study is that it uses multi-methods to corroborate and validate results (McKernan 1991, Robson 1993). Yin (1989) supports the view explaining that one of the many ways of increasing construct validity is to use multiple sources of evidence. This has been the case in this study as triangulation by way of interviews and document analysis applies.

3.2.1 Interviews

It is argued that case study is eclectic, borrowing methods used in ethnographic and anthropological approaches (Hopkins 1985, Robson 1993). For this reason, interviews were used to collect data in this research. An attempt will be made to explain these methods, their strengths and weaknesses as tools of research and their usefulness in this research.

Observations lie at the heart of the case study approach. However, they could not be used in this study because of a number of reasons. Since the study's focus is on action research it was hoped that some of pre-observation conversations, classroom teaching observations and post-observation conversations between the student teachers and their observers would be observed. But, due to unavoidable reasons this could not be achieved. All the students had completed the teaching practice when the data

collection process began. Some of these students were already preparing for their examinations, while schools were also in the processes of mid-term examinations. Observations were, therefore, ruled out and face-to-face interviews were used. In addition regular teachers in practising schools represent an important constituent in this study, however, they were not interviewed because of financial and time constraints.

Cohen and Manion (1989) explain interviews as a conversation:

... description, prediction or explanation. ...initiated by the interviewer for the specific purpose of obtaining research-relevant information and focused by him on content specified by research objectives of systematic... Cohen and Manion (1989:307).

The researcher in this study adopted a similar definition as semi-structured interviews were used to gather information about the experiences of different participants in the NUL action research. Semi-structured interviews involve open-ended questions whereby the order of asking and phrasing of the questions varies from one participant to another (Hitchcock and Hughes, 1989). For instance, in question 3, section B of the student teachers' interview schedule (see Appendix E) the students were asked to describe how they were prepared for action research. Most students seemed to be puzzled by this and it was rephrased to: "What activities or experiences were you exposed to in preparation for action research?" The flexibility and adaptability of such interviews allows one to modify the enquiry, following up interesting responses and investigating underlying motives. In addition to providing new data, the interviews with teacher educators were designed for triangulation purposes in order to check from other sources (McKernan 1991).

However, Robson (1993) does indicate that interviews are time consuming and that biases are difficult to rule out. In the present study it was difficult to maintain a neutral position as I have participated in the supervision of the NUL teaching practice. My own attitudes and prejudices might have coloured the presentation, though I tried to adopt a professional stance by presenting as much as possible the views and ideas of the student teachers and teacher educators. Nevertheless, my insider knowledge also provided a context and perspective for this research.

3.2.2 Documentation

Documents were used not only to supplement the interviews, but also as a way of triangulation. Finnegan (1996) explains that when documentary sources are used to collect and analyse evidence, two distinctions are usually made between primary and secondary sources. The primary sources represent original material, while secondary involves interpretation of the primary material. In this study original documents from the Faculty of Education were consulted. These included the Students' Handbook 1996 – 1997 and Teaching Practice Handbook – 2001. In addition four action research reports written by students under study were selected for analysis. The Faculty of Education handbooks were meant to provide a contextual background to the structure of the NUL B.Ed. programme. The projects provide an insight into the extent to which the students have conceptualised the research and how they benefited from the research.

In order to analyse the projects, guidelines developed by Stevenson (1991) for analysing action research projects were used. However, the guideline was modified to suit the purpose of this research. The aspects included in the guideline are outlined below:

- An identified problem, reconnaissance, outline of the first action plan
- Account of action and observations
- Evaluation of the first action plan, and implications for the next action plan
- An account of re-planning second action step, revisiting previous points.
- Critical reflection on the project as a whole including comments on the effects on the student teacher's professional practice.

3.3 Target population and sample

Although the teaching practice is the responsibility of the Faculty the action research is under the responsibility of the LASED Department. The nomenclature of the school-based action research project bears initial LASED course designations, that is, LED and SED designating language and social education respectively. Also the

courses are classified under the courses offered by the LASED Department from the Faculty handbook. Lastly, the respective subject specialists within the Department assess the projects of the students. Given this structure we conclude that the training and preparation of students for action research is, therefore, the responsibility of the LASED Department. This is also important in terms of defining the population for this study.

The LASED Department is responsible for the B.Ed. programme. It offers subject methods courses for eight areas of subject specialisations. These include: English Language, Literature in English, Sesotho, Business Education, Development Studies, Geography, History and Religious Education (Students' Handbook, FED, 1996/97). These are usually referred to as teaching subjects. Table 3.0 below shows the area of specialisation and the number of students majoring in the teaching subject for the course in the 2000/01 academic year.

Table 3.0. Distribution table for the 2000/01 NUL Bed.
Student Teachers' Area of Specialisation

Area of Specialisation	No. of students Registered
English Language	39
Literature in English	30
Sesotho	38
Business Education	04
Development Studies	28
Geography	27
History	04
Religious Education	12
Total	152

The target population of the study, therefore, comprises all the B.Ed. students who undertook teaching practice for the 2000/01 academic year and all the eight staff members of the LASED department. regular teachers, that is those that are permanent,

constitute another important constituency as tutors of the student teachers throughout the duration of the teaching practice. However, as indicated, they were left out of the study for reasons of space, time and limited scope of this study. It is hoped that other educational researchers will pursue studies that will involve them.

Given that the student population is distributed within the department according to areas of specialisation in terms of teaching subject, a stratified random sampling technique was used for sampling. This involved dividing the population into groups whose members share the same teaching subject major. Students majoring in the same teaching subject were grouped together as a stratum. Then random sampling was used within each stratum. A disproportionate sampling was found to be suitable as the aim was to ensure representation of every unit in the department. The technique was used in this study because when the data was collected most of the students had already left the university and could not be traced. I, therefore, had to interview the students I was able to trace and those who were also accessible as their homes were also spread over a wide geographical area. At least two students were interviewed for every stratum.

All but one of the members of the LASED department were interviewed.

3.3.1 Interviews with student teachers

Since the aim of the study is to analyse how the students are prepared for action research, the kind of support they get during teaching practice as they conduct the research, the interview was compiled around the following four major themes, partly derived from the literature reviewed.

- School curriculum decisions. This section of the interview looked at the extent to which the student teachers exercise independent professional judgement when taking decisions in mainly three spheres concerning their work, that is, school curriculum content, daily teaching/learning activities and assessment. It will also examine the factors influencing these decision-making processes, especially the impact of the school organisation features.

- The structure of the courses within which action research is offered. This section of the interview focuses on the analysis of the structure in order to determine the view of learning underlying such courses.
- The NUL action research model. This section concentrates on how the students are introduced to action research and how their research activities are supervised throughout the teaching practice.
- Student teacher – regular teacher relationships in schools. This part attempts to understand the relationship between the student teachers and the regular teachers, especially those assigned the role of tutors. It examines the kind of support and assistance students get from the teachers and how this relationship affects the students' research activities.

Formal interviews with student teachers (see Appendix E) were conducted throughout the period beginning in mid-May up to the first week of June. The interviews were conducted to elicit information about their experiences in action research as a course preparing them for the research and as a research they carried out in schools. The interviews were taped and field notes taken during the interviews. The duration of the interviews varied between forty-five minutes to one hour. The researcher alone transcribed the tapes.

It has been explained that a stratified random sampling was employed so that all the subject specialisations would be represented. Originally the intention was to interview three students sampled from every stratum. However, because of the limited number of students in some specialisations four interviewees were used in the pilot study and could not be replaced. In addition two interviews were cancelled because part of the recorded interview had been wiped off. I also encountered problems while conducting the interviews. I realised that it is was difficult to focus the interview on the training and preparation of one methods course because the students have been exposed to preparation in two courses offered by two different lecturers. Although I always emphasised the need to restrict the interview to one particular course offering I intended the interview to focus on, there was a tendency for students to refer to their experiences in method course of their second subject specialisation.

3.3.2 Interviews with the teacher educators

Seven teacher educators were interviewed over a period of two weeks in June (see Appendix F). These lasted between thirty-five minutes to fifty minutes. One teacher educator kept on postponing appointments for the interview until attempts to interview him were abandoned as time was running out. The intention was to seek information concerning their experiences in training students for action research and supervising the project. Their views were also sought with regard to the structure of the course within the B.Ed. programme. I took field notes and the interviews were taped. The researcher made all the transcriptions.

3.3.3 Reliability

Reliability was addressed at several points as the instrument was checked by the supervisor and a provisional interview schedule was tested in a short pilot study. This was carried out in order to assess and get feedback on the content and clarity of the question and the length of the schedule. The exercise also helped the researcher to guard against misinterpretation by respondents on the relevant issues. The pilot was conducted in May with a sample of four student teachers and one retired teacher educator for the interview schedule of teacher educators. All the interviews were taped and transcribed by the researcher. The pilot revealed some weaknesses in the schedules which were improved upon mainly by rephrasing or eliminating problematic questions.

Analysis of data

In addition to the document analysis, qualitative data was also analysed using coding procedures suggested by Corbin and Strauss (1990). The procedure followed involved reviewing the transcripts and dissecting the data in order to develop concepts representing an identified idea, event or incident. The concepts were then grouped together under an identified phenomenon according to their similarities in order to establish categories.

It is important to note that, as Boulton and Hammersley (1996) explain, the analysis of data begins at the stage of data collection and continues on throughout the research process up to the completion of the research report. The authors also explain that the categories produced during the coding process come from different sources. Some of these sources may include the researcher's background knowledge, literature or the data itself. This is an inductive and deductive process in the sense that patterns emerge from the data, while at the same time prior knowledge of theories helps to complement findings.

The last stage of the analysis involved comparing and contrasting items assigned to the same category. Corbin and Strauss (1990) indicate that Glaser and Strauss referred to this process as the constant comparative method of analysis. Through axial coding new relations among the categories were identified and new patterns emerged which led to development of themes derived from this analysis.

3.5 Presentation of the findings

Data analysis and presentation of the findings included qualitative methods. The most difficult task was to present the findings in such a manner that it depicts the perceptions and perspectives of both the student teachers and the teacher educators about the NUL action research. It was difficult to try to synthesise the information as it is, without the interference of my theoretical analysis. However, I have tried to maintain a balanced posture, the synthesis, though slightly different from the theoretical literature represent my reading of the pattern that emerged from the data. The next section deals with the presentation of these results.

Chapter 4

Analysis and Interpretation of Data

This section of the study covers analysis and interpretation of data. It is divided into four sections covering details of the population sample; action research at NUL Faculty of Education; the LASED action research project; the teaching practice environment and the action research project product.

4.1 Sample details

A brief presentation of the profile of the interviewees introduces this section. Eighteen student teachers and seven lecturers were interviewed resulting in a total of twenty-five interviewees. All the students were selected through random sampling. The breakdown of the personal details of the respondents follows.

4.1.1 Student teachers:

AGE

Age	20 – 29	30 –39	40 and above
Number of students	11	6	1

Table 4.0

SEX

Female	13
Male	5

Table 4.1

TEACHING EXPERIENCE

None	7
Two to Three years	6
Five years and above	5

Table 4.2

EDUCATIONAL QUALIFICATIONS

STC	9
COSC	6
Others	3

Table 4.3

NB: STC – Secondary teachers’ Certificate; COSC – Cambridge Overseas School Certificate.

4.1.2 Teacher educators:

SEX

Female	Male
3	4

Table 4.4

Number of Years in the Institution

Two to Three	2
Four to five	2
Five and above	3

Table 4.5

4.2 Action research at NUL-Faculty of Education

This section covers analysis of the structure of courses that prepare the students for action research and also the teaching practice as a course within which action research is undertaken. The intention is to find the philosophical view of learning embedded in the courses.

4.2.1 Understandings of action research by students and staff

In order to understand how the student teachers viewed action research they were asked to explain action research. Analysis of the questions revealed five categories of

understandings. Seven students explained that it involves identifying a problem from a classroom situation and finding ways of solving it. Another category of four students mentioned that it involves finding the most effective methods, while another group of four presented it as research into the practitioner's practice carried out by the practitioner. In the other category of two students it is perceived as research undertaken by the teacher for improvement of practice. The last category is where it is explained as classroom research. Table 4.6 below shows the categories.

Categories of Definitions of Action Research

Categories	Examples of Comments
Testing methods	Finding the best/effective method Research based on techniques of methods
Solving classroom problems	- identification of problem and finding solution - Research undertaken by teachers to solve problems - A way of finding solutions to educational problems
Classroom research	- Research based on daily lessons
Improvement of practice	- research meant to improve teaching and learning followed by action
Research by the practitioner in his/her own practice	- research you do on yourself - research you do when practising - reflection on teaching by a teacher who is actually teaching

Table 4.6

When asked how this type of research differed from other research strategies the students could not tell. In addition another question on the type of data collected and instruments used for data collection indicated that they had used interviews and questionnaires administered once before the end of teaching practice. Similar categories to those in Table 4.7 were found when the students were asked about the purpose of action research. The categories are presented below.

Students' Views on the Purpose of Action Research

Developing problem-solving skills	4
Improvement of practice	6
Sharpening awareness skills	3
Testing methods	2
Information sharing with lecturers	2
Encouraging intellectual independence	1

Table 4.7

To find out the extent to which the students felt the identified purposes had been fulfilled they were asked to explain ways in which they had benefited from the action research.

Six respondents explained that they had learned the most effective methods of teaching a particular subject. For some the discovery involved the most effective teaching technique. Six other respondents indicated that they had become aware of how they teach and learned to adapt their methods in order to suit different situations. Their comments included: "I have learned that I should pay attention as I teach ... I don't take things for granted" (ST16) and "I have learned that if one method fails you change" (ST14). Another response indicated that the student had learned that it is possible to solve classroom problems while another one explained that literature reviewed had revealed different ways of motivating learners. Four respondents explained that there had been no change. Two of these explained that they did not benefit from the action research because they completed the report after teaching practice. They explained that they had instead benefited from the teaching practice.

Although the responses show different ways in which the students benefited from the research a lot of emphasis in most of the comments was on development of awareness and discovering the effectiveness of one method or skill. There seems to be a link between what the individual students mentioned as purposes of action research and the benefits derived from engaging in the research.

The teacher educators' views about action research were also sought. A more prevalent definition among the teacher educators explained action research as research undertaken by a practitioner while in action. One such definition explained that action research is: "... that kind of activity where a teacher tries to reflect on her/his teaching and think of strategies of improving her/his classroom teaching" (TE5). TE1 elaborated by indicating that:

My emphasis is on it being an on-going process through which the teacher is able to identify or notice teaching/learning problems, reflects on why they are there, why they recur, and then think of the ways of correcting (them) ... then go on further reflecting on the effectiveness of the solutions (TE1).

The emphasis of the definitions is on it being problem focused research as one lecturer explained that it is a research that focuses on an immediate need: "If there is a social need you try to address it" (TE5). The educator, however, commented that when teaching the students: "I follow the guide that was developed by LASED" (TE5). Some educators' explanations of the nature of problems to be researched are specific to classroom problems as TE2 emphasised, namely:

...problems related, relevant to the teacher concerned and to his/her instructional milieu – the students, content, methods, including the surroundings in which he/she has to do that teaching... if anyone of these poses a problem, then it is incumbent upon the teacher to find a way of solving it whilst continuing with the teaching. It shouldn't interfere with his teaching. It should facilitate the improvement of his teaching (TE2).

The last part of this excerpt demonstrates what transpired when the educators were asked about the purpose of action research in the B.Ed. programme. All the educators mentioned that the purpose was to help the students to realise that they can improve their practice and thereby contribute towards solving teaching/learning problems. The emphasis throughout the responses explained that the teaching is improved because the research involves reflection. Although two educators did also indicate that the purpose is to improve classroom teaching, they explained that this was their view and that they had not been informed about the Department's aim for introducing action research in the programme.

4.2.2 Courses offering teaching on action research

As a preliminary to questions on how the students were taught action research, the students were asked to identify courses that prepared them for the research project. Table 4.7 below shows courses that the students identified as courses that focused on preparing them for the project.

Action Research Courses

Methods courses	16
Educational Foundations courses	5
Teaching practice	5

Table 4.8

All the students, but two, identified methods courses as courses within which they had been prepared for the project. To identify the view of learning underlying the course the interviewees were asked to indicate the frequency of discussions in lectures. The responses are summarised in the Table 4.9 below.

Frequency of Discussions in Lectures

Frequent	Rare	Never used
9	2	7

Table 4.9

The courses in general revealed an inclination to encourage learners to interact with issues raised in lectures. Nine students mentioned that lecturers encouraged discussions on theories presented in lectures. They also indicated that sharing of ideas about teaching was encouraged as a substantial number of the students had experienced teaching before joining the university. The study's sample shows that eleven students had teaching experience.

Frequency Table Showing Employed Methods

Methods	Frequency
Teacher-centred	8
Learner-centred	8
Two-way	2

Table 4.10

In relation to methods of teaching employed by the lecturers, eight students identified learner-centred strategies as commonly used methods. The students explained that the lecturers expected them to find information on issues raised in lectures and rarely employed lecture-dominated presentations. However, an equal number of students identified teacher-centred methods as the predominantly used methods.

Another aspect of importance to this study is practice-based teaching. In order to determine more aspects of the philosophical views of learning embedded in the structure of the courses it was found necessary to determine the extent to which the courses incorporated practicals.

Classroom-based Learning Activities

Form of activity	School practice teaching	Peer teaching/ micro- teaching	No practicals
Frequency	2	14	2

Table 4.11

The students explained that they engaged in teaching practicums in the form of micro-teaching and peer teaching. The activities incorporated self-evaluation presented to and discussed by the fellow students after each lesson presentation. It is important to note that the students mentioned that very few students participated in the teaching aspect of the practicums as there was not enough time since the groups were big. As some students mentioned, the time was short because the practicums were undertaken during the last two weeks before the end of the semester. Two students mentioned that

they had been taken out to schools for practicals on two occasions. Even in this case few students participated in the actual teaching. The students explained that four students participated in teaching although the whole group participated in the discussions and evaluation of the lessons.

In addition to the courses offering teaching on action research it was also important to identify how the students are prepared for the research. This section presents the views of both the students and the lecturers.

4.2.3 How action research is taught

The students were asked to describe how they were prepared for action research. Fifteen students indicated that the presentations were theoretical, spending about one or two lectures on action research as one student explained:

I was taught action research during the last day. We were taking notes as we were told what the format of the project looks like ... details like what is a hypothesis ... No (my emphasis) (ST06).

They explained that the courses covered things like aspects of action research, e.g. identification of the problem, literature review, analysis of data and others. However, the students invariably mentioned that the aspects were highlighted as being important, not explained. Student ST15 commented: "... only been taught that you have to analyse the data, but you don't know how." They also explained that the courses also covered the format of the project, how many chapters there should be and what each chapter should cover. It is important to note that this varied between courses, although the report format is included in the teaching practice handbook (see Appendix D).

Three students added that they were provided with samples of projects written by previous students, while two other students explained that they had been given some handouts and a list of references on research in general. Also three students stated that there was no preparation. An excerpt from one student's response illustrates the above mentioned assertion:

I wouldn't say there is any preparation as such, you only have the sample to guide you while you do not have the knowledge of action research as a basis for writing (ST12).

The students were also asked if the preparation for the project was adequate. Four students said it was, while fourteen students explained that it was not adequate. Student ST05 complained: "They don't give us even half of what you realise you need when you are out there." Probing further to find areas in which the preparation was lacking, the students mentioned different reasons which have been classified into five categories presented in the Table 4.12.

Categories of Responses on the Inadequacy of the Preparation for Action Research

Lacking in practical activities	6
The sample provided did not provide enough guide	3
Lacking in teaching us research skills	6
The time was too short	4
There was no preparation	2

(most of the fourteen students mentioned more than one kind of response)

Table 4.12

The students' views about the preparation are similar to the lecturers' views examined in the following paragraphs. The lectures invariably mentioned that they weave in action research in the methods courses. One lecturer indicated that there was no course for action research. When asked whether she offered courses preparing students for action research, she explained: "No, because really there is no slot for that. I usually leave two weeks after peer teaching and all other things for action research. This is taken from SED 453¹ contact hours" (TE7). Another lecturer, TE1 explained that:

... I weave in action research into LED 426 (English Language methods course) because I have come to realise that there isn't enough time to prepare students before they go for teaching practice ...(TE1).

¹ SED 453 is a methods course in Religious Education

However, the method of weaving in differed from one lecturer to another. Most of the lecturers explained that they introduce action research within their methods courses towards the end of the first semester.

The lecturers were also asked about how they prepared the students for the research. The responses indicated that the presentations involved only the theoretical aspects of action research. TE1 explained that:

...the way it is now is that we don't have time unless you as an individual lecturer pinches on a course that isn't action research, so that, ...(You) introduce them to a bit of theoretical aspect of action research and the practicals ... the practical aspect of the preparation is missing (TE 1).

The lecturers were also asked about activities they engage the students in as a way of facilitating development of action research skills, two lecturers mentioned the importance of diaries and one stated: "I usually advise them to make sure that they complete the self-evaluation form after every lesson" (TE2). Lecturer TE5 mentioned micro-teaching. When probed to find out more about this the lecturer explained:

... in the sense that when you teach you teach in order to put the message across ...it is not easy to (check on this) ... unless you notice that, listen to yourself and get comments from your peers... therefore, the exercise helps them to reflect on their teaching (TE5).

The other lecturers indicated that they usually advise students to submit drafts so that they can help them. Elaboration on the nature of the drafts revealed an emphasis on helping students to identify suitable problems for the research. One lecturer explained that he usually advised them to start the literature review while still on campus. TE4 explained that she had been taking students out for practicums in schools but that the practice had been restricted because she was told that there were no funds for such activities. Nevertheless, she continued the activities using a nearby school offering the subject she was concerned with. However, as she explained, this was very limiting as her group consisted of twenty-eight students, though she divided them into groups. It was explained that only two students could teach during a visit.

The lecturers also explained that they spend two weeks, roughly three hours per week, on the preparation, which was one of the limiting factors in the preparation of students for the research. All the lecturers mentioned that there was no time to prepare the students for the course. They explained that because of time constraints they have to rely on lectures only, in order to focus on what action research involves. One lecturer explained that he tried to organise some extra hours for the research, but failed because: “Education students run up and down in between lecture rooms from six in the morning to five o’clock” (TE6). He explained: “The students’ timetable is packed in the first semester, because the yearlong courses in curriculum studies² are squeezed into one semester” (TE6). Other lecturers also mentioned the difficulty of getting the students together during the first semester before they leave for teaching practice. One of the reasons mentioned was that the students were busy preparing for the practice, while some of them were already visiting the schools in which they would be practising.

4.3 The LASED action research project

The teaching practice course has its own specifications that illustrate the structure of the course. The course specifications include observations, peer meetings submission of teaching practice file at the end of the practice and assessment of the classroom teaching.

4.3.1 Teaching practice structure

The teaching practice guidelines indicate that teaching practice creates an opportunity for student teachers to develop reflective practice. As already indicated, emphasis is placed on the role of the regular teachers in schools and members of the Faculty of Education in assisting the students in this regard. Strategies proposed include observations and supervision by the teaching practice tutor and the Faculty of Education staff. The guidelines also specify that each student must have at least three observations by the university lecturer before assessment of the classroom teaching.

² curriculum studies refers to the subject methods courses

Examination of the relationship between the students and the teacher tutors revealed that the tutors were willing to assist the students. Thirteen respondents indicated that the tutors were co-operative, friendly, assisting them in every way possible. It was found that this assistance included supplying the students with necessary material like textbooks and other teaching material the students requested. It also included helping them with topics students felt uncomfortable with and administering test or class-work when students missed lessons for unavoidable reasons. With regard to observations only five students indicated that the tutors observed them. Thirteen mentioned that the tutors did not allow them to observe their lessons and also refused to observe the student teachers' lessons.

Of the five students who indicated that the tutors observed them, only one stated that the observations were useful for the research. The rest explained that the observations were for teaching practice. This comment recurred when the students were asked about the instruments they used for data collection in their research. This was by way of seeking clarification on the definitions they provided for action research. All the interviewees except for two indicated that they used interviews and questionnaires administered towards the end of the teaching practice. When asked about the observations, including those by the lecturers, they explained that the observations were for teaching practice.

It is important to note that the student who indicated that the observations were useful did not use them in her research. When asked how her relationship with the teachers helped her research, the student explained: "They observed my lessons, we even talked about the lessons, evaluating them in honest and yet friendly discussions"(ST08). Analysis of the student's project, however, revealed that the observations had not been referred to at all in the whole project.

The handbook also specifies that the students are to meet three times during teaching practice in order to share their experiences (Teaching Practice Handbook 2001:6). The meetings are compulsory for all students. Because of the large numbers of students and the distribution of the placement schools the students are usually divided into groups according to the location of the schools. Students in nearby schools meet

together. This means that the groups are mixed, that is, they include students majoring in pure sciences and those in humanities and social sciences.

Reports of the meetings revealed discussions of the general problems the students encounter in schools, especially relationship with tutors and other regular teachers. These also included the regular teachers' attitudes towards observations. The major issue that was mentioned in most of the reports was lack of teaching materials, e.g. textbooks in schools. Some of the reports mentioned problems related to the NUL supervision and assessment arrangements of the teaching practice. One report in which action research was mentioned indicated that:

The focus (of the peer meeting) was on the topics for action research project; where discussion was on the ways of framing them, points to be included and the suitability of the topics for the project (Peer Meeting Report)

This was also mentioned by one respondent who explained that discussions about the research during the meetings were related to the difficulties that they found themselves faced with as they try to write the project. She states:

... you don't know the steps, and some people ... some of my colleagues were saying, during the peer meetings that they thought that you just write 'it went well, my students were like this ...' they didn't know what was to be written (ST05).

In general the reports indicate that the peer meetings represented fora for sharing problems students encountered during teaching practice.

4.3.2 The role of teaching practice on action research project

The assessment of the teaching practice course is in relation to three components, the teaching practice file, classroom practice and action research report. Presentation of students' views in relation to these follows.

Assessment of the classroom practice is based on the assessment instrument indicating skills and areas in which students are to be assessed (see Appendix B). In order to determine the impact of the assessment of teaching practice on action

research, the students' feelings in relation to this matter were sought. Thirteen students indicated that the assessment had no impact on their research. Five students indicated that it affected their research.

Some of the reasons advanced by the students who indicated no impact, illustrated that the assessment was something completely different and, therefore, had nothing to do with the research. They explained that even if it affected them, it was a matter of suspending the research for that day of assessment only. The response: "No ...I considered it to be a one or two day event that would be passing" (ST08) illustrates the point.

Others respondents mentioned that the assessment focused on different skills not necessarily on what a student would be researching, although, as the student explained: "one of the skills might be what you are researching" (ST17). On the whole most of the students stated that the assessment had nothing to do with the action research.

Two of the comments made by those who stated that the assessment affected their research, demonstrate the impact of the assessment on the research. One student explained that: "... it does because you are chasing two things at the same time, except that a particular skill is part of your research" (ST17). (ST16) also states: "It affected it (the research) positively as during the observations ... this helped us to improve general teaching skills."

One of the responses, although in some way contradictory, also demonstrates the effect. The respondent explained: "I don't think it did because I found it difficult to teach while at the same time concentrating on research, ... lesson plans and others. So I don't think it did" (ST08). Explaining that assessment of teaching practice does not affect action research Student ST15 also said:

...its something separate it has nothing to do with action research. But, I think the marking is unfair because you take time to prepare the lesson plans and yet it takes a smaller share of the marks whereas with the project you prepare it in about two weeks even though data collection is over a long period. And writing the project doesn't require as much energy as you put in lesson plan preparations.

This attitude is also revealed in responses to questions in other sections of the interview which also illustrates the impact of teaching practice file, that is lesson plans and others on action research. Commenting on the factors that hindered the action research, namely Question 2, Section D, student ST 12 explained with:

Another factor is that there is too much work during teaching practice, so that one does not have enough time for action research ...I put it aside and concentrate on lesson plans ...Preparation for lesson plans occupied most of my time, especially objectives, and knowing that supervisors are coming. The plans are quite involving and time consuming ...(they) involve things like preparing teaching aids and in geography it's a must to have teaching aid for every lesson ...(ST12)

Another interviewee, responding to the same question, argued that the lesson planning required much of his time and also made for a stereotyped teacher because if you deviated from it: "... yo yo yo Ntate! (ma-a-n) you would be told, 'what a useless teacher!'" (ST16). The required observations, the peer meetings teaching practice assessment and the file illustrate how the teaching practice is structured. I conclude this section by looking at assessment of the research report as another aspect of the structure that needs to be examined.

The impact of the assessment of the research report was determined by seeking the interviewees' feelings about the issue. Seventeen responses indicated that it affected the students' research, one case illustrated no impact. Analysis of the seventeen responses showed that in nine instances the impact was negative, in four instances the impact was moderate and the rest illustrated a positive impact.

Explanations provided for negative impact included pressure that the respondents expressed the assessment of the report exerted. They explained that the assessment exerted so much pressure that their attention was diverted from more important matters, such as their own professional improvement. Some also explained that sometimes what they write is just to impress the lecturers so that they even included what they knew the lecturers liked even if they did not research on such issues. Some of these students mentioned that they avoided deviating from the prototype, especially as they were told it was the best.

Those who felt it had a moderate impact explained that it affected them in terms of finding the relevant topic. Others mentioned time constraints, especially as there was much to write about. One student explained that the assessment did not have much impact but that the research would have been: "...more fruitful if I had done it for my own improvement" (ST01). The four students who felt that the assessment had a positive impact indicated that it helped them to consider the research more seriously. They felt committed to write the report well, in precise language. The following excerpts provide evidence of these views.

ST04

Sometimes you include what you know your lecture likes even if you didn't try it, e.g. I pretended to have prepared charts for every lesson in DS³ even though I knew this was not the case, I included them because the lecturer likes them. Even in Language⁴ I used the lecture method most of the time because the students were many and the time period was short, so I wrote as if I used learner-centred method because I know she doesn't like it (lecture or traditional methods).

ST02

Yes it does (affect us)...because it puts a lot of pressure on you since your aim is to pass, even if it means writing something that didn't really happen. Its not authentic, you just write, ... its like ... this has to be right.

ST05

... negatively, because it takes your attention from what is really important, actually it makes you just to think about the marks, whether you are going to impress the person who is going to mark you, yet you forget that actually is for your own good as well. You just want to make sure that at the end of the day you have passed it very well. So for the lecturer to be impressed is one of the first issues when your are writing. So I don't think that is encouraging.

The presentation so far has concentrated on the structure of the teaching practice as a course within which students carry out the research and the role of teaching practice on the action research. However, how the teacher educators and the teaching practice tutors assist the students within this structure is equally important.

³ DS this refers to the subject, Development Studies

⁴ Language in this case refers to English Language

4.3.3 Role of teacher educators regarding the project on teaching practice

The teacher educators were also asked about how they determine action research from students' activities during teaching practice. Four out of the seven teacher educators admitted that it was difficult to tell. All the educators mentioned the importance of determining whether the students have identified relevant topics. One educator explained:

Usually I spend the first few weeks of teaching practice checking on students' progress in schools...whether they have identified the problem...I have to see it, and even as to whether they have formulated the objectives and the significance of the problem ...even before they can carry out the research I must discuss it with the individual to make sure that it is relevant, significant and all (TE2).

Lecturer TE5 explained:

The common complaint we always get as you get there is... as you ask...how is it going? 'My tutor doesn't want to be observed. So then I say, well then do you have a topic? Then when a student says I had this one and I was thinking of that one or I think I'll do this one then you know he explored, he is studying his class. But, if they say oh, I'm fine ... then I know that this one cooked information.

Another one in answer to the same question explained that she usually emphasises during lectures that they should keep diaries. When asked if she examined their diaries as a way of finding out about their action research she responded with:

Most of them tell me. When they see me they do tell me about the topics they have identified. Diaries? I am not sure, because, there are some who write on pages ...but, those I am able to see during teaching practice do come and tell me about the research (TE7).

Other than inquiries about the topic the lecturers explained that it was difficult to determine. Only one educator mentioned that she examined students' diaries and the self-reflection section of the lesson plan when time allows, which she said was rare. She explained this with:

It's a pity there is never enough time, especially time to talk with them more even before they go to class because of a number of factors. Half the time we get to the schools rushing to class, we're just on time to get into their class when they are going to teach. Often we have even walked into their class when they are already teaching, because of ... various reasons, we are terribly understaffed, as staff who supervise students when they are on teaching practice, ... in terms of drivers and therefore transport... (TE1).

Other teacher educators also mentioned that they did not have enough time during teaching practice to check on the students' progress with regard to action research. They also identified understaffing as a constraint, one added that:

"...as you visit one school you have to see every student in that school because we are understaffed which, at times may mean moving from one class to another without a break" (TE4).

Another one explained that she never observed her students during teaching practice. This was in response to the question: how do you determine whether the students are engaged in action research during teaching practice? The educator explained that she prefers to read observations about her students from her colleagues. When probed to find out how she monitored students' progress on the research she stated that the students know that they can send for her when they need her.

4.3.4 Role of teacher-tutor regarding the action research on teaching practice

The relationship between the student teacher and the regular teacher is important in action research as proponents of action research have argued that it is more effective when undertaken collaboratively. It may be more important in teacher education as the students need support of regular teachers for observations that may provide them with data for the research. Moreover the teaching practice handbook highlights the importance of these observations in developing the students' reflective skills. The interview schedule includes a section for the students to describe their relationship with both the regular teacher and the rest of the staff members (see Appendix E).

Thirteen responses show that the relationship between the tutors and the students was friendly and that they treated the students as colleagues. The students also mentioned

that the teachers were co-operative and willing to assist them. Two responses indicated a friendly relationship but with teachers reluctant to offer assistance of any form. Two other responses indicated that there were no tutors as the teachers responsible for the classes were on leave. The last two showed that the relationship was not friendly.

To gain a better understanding of the impact of these relationships on the action research the students were asked questions about the impact of the relationship on their research activities.

Twelve students mentioned that the relationship did not affect their research. One student explained that the teaching practice tutors: "... didn't care much about what we were doing" (ST16). The students explained that the tutors perceived the research as one of the University requirements to be fulfilled in order to pass.

On the other hand six students explained that the relationship affected the research positively. Some of the students explained that the tutors responded to their questionnaire and allowed them to interview them. Others explained that they provided them with the necessary information such as an advice on how to do action research. One student stated that the relationship impacted positively on her research in that: "(The tutors) ... advised me to identify and focus on one problem and to complete the self evaluation forms daily" (ST15). It is important to note that of the five students who were observed, only one student explained that the relationship with the tutor affected her research activities positively in that the tutor observed her lessons. However, this student did not include these observations in her report.

The students were also asked about the views of the teachers on their action research. The responses were classified into six categories which, are presented in the table below together with examples of comments of the interviewees.

Teachers-tutors views on the students' action research

Category	Example of Comment	Frequency
Not aware	-I don't think they were aware -I don't think they had an idea - didn't know about it - I didn't talk to them about it	7
I don't know	- I don't know, they only helped with observation - they said nothing	2
Aware but, not interested	- no interest - didn't care much about it - only knew about my topic and objectives	3
Valuable	- found it useful -good idea, could benefit schools	2
University requirement	- didn't comment to them it's just a university requirement - thought of it as a requirement by NUL for me to satisfy	2
Didn't like it	- said it was boring - said action research is where we discredit them, saying they do not do a, b, c ...	2

Table 4.13

4.4 The teaching practice environment

The school environment has been analysed into factors that include school curriculum decision-making processes and school organisational features. This section presents each of these factors in detail.

4.4.1 School curriculum decision-making processes

One section, section A of the interview schedule examines how decisions on curriculum are taken in schools as the student teacher begins the teaching practice. This also examines factors that influence these decisions. Responses to the question: who takes decisions on curriculum content for teaching practice, daily teaching/learning activities and assessment are presented in a table below.

Curriculum Decision-Making

	Student Teacher	Regular teacher/ Subject Department	Both
Curriculum Content	2	12	4
Teaching/learning Activities	18	-	-
Assessment	8	8	2
Total	28	20	6

Table 4.14

The table shows that decisions on curriculum were taken either by the student teacher alone, or the regular teacher or subject department without involving the student teacher, or collaboratively by both parties. As the table shows most students, twelve of them indicated that selection of content for their teaching practice curriculum is carried out by the school through the subject departments or regular teachers responsible for classes allocated the student teacher. Only two students indicated as having been allowed the freedom to select the topics of their choice from the syllabus. Instances whereby the selection was carried out co-operatively by both parties were only four.

All the students expressed the freedom to select teaching/learning activities. In assessment almost half of the cases seems to have been controlled by the school through the regular teacher, while in other cases this was left to the discretion of the students. It is only in two instances where this seems to have been a shared responsibility of both parties.

In addition to the decision-making processes experienced by students during teaching practice, the interview also included questions on factors influencing these curriculum

decisions. In relation to content not much was said, as this seems to be the responsibility of the school. A few students who participated in decision-making on this aspect mentioned the prescribed syllabus and textbooks, and the NUL supervisor's expectation as the main determining factors.

4.4.2 Factors influencing decisions on teaching/learning activities

The factors affecting decisions on methods have been classified into those, which illustrates the student teachers' ability to exercise independent professional judgement and those that could be identified as being beyond the control of the students. Common factors relating to the former included the nature of topics or subject, the pupils' level of comprehension, intellectual ability, background knowledge, and/or weak language skills or how they, the pupils responded to classroom learning activities.

Factors that were identified as relating to contextual factors beyond the students' control included availability of teaching material/aids, the NUL supervisors' expectations and TP requirements. The latter has already been discussed presentation will, therefore, be based on the first two.

Some student teachers explained that they had to employ certain methods because of a shortage of resources. One student explained that she was forced to use group work because students did not have textbooks so they had to share a few that were available. Another student practising in a different school mentioned a similar case. The student explained that the school practised a rental book system, which restricted the learning activities he could try, as the learners had access to the books while in class only. Other resources mentioned included things like maps, globes, time and others. Time will be discussed in details under school organisational features in relation to fixed timetables.

The students also raised another point in relation to the prescribed textbooks, which they stated include activities for the daily lessons. This was found to be prevalent in religious education, business education and development studies. When asked if they were bound to follow the texts, they said they were not bound, but explained that the activities were effective, while some said they were good. One student, however,

complained that the activities were too elaborate, taking too long on some things that could be explained in five minutes or so.

NUL supervisors' expectations affected the students' decisions in various ways. Comments by some of the interviewees under the teaching practice requirements section demonstrate the expectations of some supervisors. Other students made similar comments when responding to other sections of the interview. In answer to a question on the factors affecting the selection of topics, one of the two students who mentioned they were free to select topics of their choice, explained that:

... I also selected those (topics) in which I could see that I would be able to make teaching aids. I did include other topics, but I chose mostly those I would be able to use teaching aids, because the lecturers encourage us to use teaching aids (ST15).

Another student also explained, in response to a question on the effect of timetable on her teaching strategies that:

The changing timetable also affected my teaching ... sometimes you plan to finish certain topics within a particular period so that when the supervisors come they find you teaching something else, not what you wouldn't have liked to teach for observations. For example, in development studies students are interested in gender issues and they are active a lot in such topics, which makes it more suitable for observations by the (NUL) supervisors (ST01).

It is also important to note that the student did not mention this as a factor impinging on her selection of what topics to teach in her daily lessons. Other students mentioned that they employed certain methods in their teaching because the lecturer encouraged the use of the method.

The expectations were also identified in responses on the impact of the amount of work and scheme of work, students were expected to cover during teaching practice. The students mentioned in their elaboration that they realised that their pace was fast when the regular teacher remarked and asked whether they ever assigned some class-work for practice. Their response to this revealed the influence of the University lecturer's expectations on the teachers' decisions. One student explained:

I had covered too many topics within a short period of time, in fact, I noted from the scheme of work that I had covered too many topics in one week. And I realised that I wanted to start a new topic ...I feared that if supervisors visit they shouldn't find me doing some exercises for practice with the kids. They should find me teaching... (ST16)

In answer to the regular teachers question: "Do you ever give them any exercises?" the student's explanation of the response is that she did give exercises as homework and did mark them, but used time tabled periods for teaching new material. Another student also revealed the same concern as she explained the cause of her fast pace:

I realised that another cause was the need to teach a new topic everyday so that when supervisors from the university arrive for visits I would be teaching a new topic (ST 13)

Thus it can be seen that, although the students explain that the school syllabus did not affect how they taught, there are other factors like the supervisor's expectations that might influence the students' decisions on how they work.

The factors based on professional judgement, were, however, mentioned by more students than those who seemed to be controlled by contextual factors.

4.4.3 Factors influencing decisions on assessment

The last aspect of curriculum on the table, assessment, shows that eight students exercised some freedom to take decision on the matter. There were instances with restrictions on this matter, although the students did not acknowledge this fact. These were identified when the students were responding to other sections of the interview. A brief outline of these instances is presented. When asked if the class size had any impact on his teaching one of the student teachers said:

No, except in assessment where I had to follow my tutor's advice. He told me to give them (learners) a test, even if it's a short one on Thursdays when we have a double period because accounting requires a lot of practice.

Further probing to find if he followed the advice indicates that he did because he felt that this was the tutors' class. Another incident relates to where a student commented

on fixed timetables and explained that single periods were short as students moved from one classroom to another in between periods of subjects taken as electives, one of which was hers. She explained that a lot of time was lost during these movements which she explained: “was a bit disruptive as only half the time was left for teaching which is too short, especially as one is expected to teach and come up with some questions (class-work)” (ST09). When asked as to whose expectation this was, the response indicated that it was that of the school authorities. The other student mentioned that the school in which she was practising had a policy to give a common test to the classes every month as she was explaining how she gave tests more often than the school required. When asked if the school policy did not infringe on her freedom to decide on matters regarding assessment, she explained that most of the times they, the student teachers, had been selected to set the tests.

Factors that students mentioned they considered when deciding on assessment, however, generally included the assessment of student teachers’ objectives in order to evaluate learners progress in class as well as the teachers’ own practice. Some raised a point that the learners were forgetful and, therefore, needed to be reminded of what they had learned.

4.4.4 School organisational features

School organisational features in this study cover school timetables, class size and prescribed syllabus in terms of the amount of content to be covered by the student during teaching practice. The question of external examinations was dropped because students felt it had no impact on their work as they were allocated classes examined internally by the subject teachers in school. The researcher also felt that the aspect had been addressed under factors impacting on assessment. The interview schedule also provided for the student teachers’ comments on any other factors deemed by them to be relevant to their work. We will now look at the impact of these on the student teachers’ choice of methods to use in their daily lessons.

The time allocated for one lesson in a school is forty minutes, usually expressed as single period, whereas two successive lesson periods for one subject are referred to as a double period. Some students welcomed the fixed timetable set-up on the grounds that it was efficient and helped them to be disciplined. When asked if the timetable

had any impact on their choice of method, most of the students also indicated that they felt more comfortable with double periods as these allowed them enough time to cover adequately what they had prepared. They, however, expressed dissatisfaction with single periods, while another group explained that there was adequate time in some classes and limited time in others. These were students who had been allocated double periods in some classes and single periods in other classes. The distribution of how the students felt about the school timetable is presented in the table below.

The impact of the timetable on the students' practice

Restrictive	9
No Impact	4
Restrictive in some classes	5

Table 4.15

Student who expressed dissatisfaction with the single periods raised reasons in relation to the nature of the subjects taught, pupils' learning ability and the pedagogical intentions of the student teacher. The subjects, which were mentioned as requiring more time, were accounting and literature in English. One student of literature stated that:

The problem I had with (that school) is that most of their lessons are single periods... sometimes you find you want to cover, say a scene and as the students get interested and its like they are catching up, trying to follow a scene it's time up. The single periods were really killing me, and the timetable was not flexible. You couldn't negotiate doubles, they would tell you: "no way", it will create clashes that will take us time to solve when you go away". (ST16)

The student went further to explain that the lessons were tracking behind the set scheme of work because he wanted to use dramatisation when teaching drama and that the subject, as other students indicated, required substantial amount of time. However the schools in which the students were placed allocated double periods for other subjects as ST12 explained: "At (school X) double periods are allocated for subjects like maths and science for experiments".

Other students who found the timetable restrictive explained that they could not cover as much content as they were expected to cover. The main reason mentioned being that learner-centred methods were time-consuming, as ST01 explained:

...for example, discussions..., you find that you keep talking about the same thing, you don't even move, so you can't cover much. ...the teacher needs to control the discussions...but then, again what you'll be aiming at is for them to understand so you find that it is taking more of your time. This sort of a thing puts pressure on the teacher to use methods that are less time consuming.

Other student's complaints about time were in relation to school syllabus, and the amount of content they were to cover. When asked how they solved this problem, they stated that they changed to methods that enabled them to "catch-up", as one student mentioned:

My ... intention was to use discovery method all the time, seeing that students understood, like, after I've taught them they would be just fine, because they have discovered things for themselves. But, sometimes I would have to switch on to other methods such as lecture, such as ... may be these other methods that put me on the centre, in order to cover the topics...(ST18)

The students indicated that the schedule was fixed and could not be changed as it would result in clashes when they left. Even in cases where individual students' lesson periods clashed the matter was left as it is, because resolving it would result in havoc to the whole timetable. This was found to be common as the students' majors involved subjects and lessons taught by two or three different teachers. As mentioned, another factor that the study explored covers the impact of class sizes. The following section presents the views of the respondents with regards to this factor

The classes that were explained as moderate ranged from twenty to forty seven pupils per class, while those that were identified as big range from forty-nine to sixty seven pupils. Students with moderate classes expressed satisfaction with these classes showing that they did not pose any problems. The students mentioned that they experienced problems with the big classes. One student explained that her classes were fine except for one class she could not control because the students were too many and crowded. The table below shows the distribution of how the students described the class sizes.

Student teachers' perspectives on the class size:

Description of the size	
Moderate class size	5
Big classes	12
One moderate, one big class	1

Table 4.16

The students who complained about the big classes mentioned that the classes were crowded, and that this restricted teacher movement. With some students, classroom management was identified as another problem with large classes. One student expressed her frustration with this as she felt that she had completely failed to control the class and explained that she never looked forward to going to the class, thus: "Form D was a real problem because I used to teach sixty seven students". When asked how this posed a problem the student explained:

We had been asked by our lecturers here (NUL) to move around, to make purposeful movements. I never used to do that because there was no where to move to, the class was too crowded... and discipline-wise I used to fail a lot because you find that, at the back they are noisy...ST18.

Another student who expressed frustrations with such class sizes was one who intended to use the skill of teacher movement in order to promote teacher effect. The student indicates that moving between the desks was a problem because the class was crowded.

The majority of students complaining about large classes raised the issue of assessment. They explained that big classes were a problem because they were expected to teach and give class-work or assignment. When asked whose expectation this was, some mentioned the school/regular teacher and others mentioned the University. Of particular interest to the researcher in this response is that further analysis of the respondents' interviews revealed that the respondents had not disclosed this fact when asked about factors that influenced their decisions on

assessment. However, the students explained that marking the work of such big classes was time consuming, as they still had to plan their lessons and prepare teaching aids.

The school syllabuses did not have much impact on the students' decisions. Twelve students indicated that they covered their scheme of work. Only six students seemed to have experienced problems in this regard. However, while only one student out of the six said it affected her teaching, the rest stated that, although they did not complete the drawn scheme, this did not affect their teaching. The above section focused on the extent to which the student teachers felt free to decide on curriculum matters in schools.

4.5 The action research project product

The action research activities, that is, the preparation and supervision of students' research culminate in research report that students submit together with the teaching practice file two weeks after the teaching practice. Examination of the reports concludes this chapter. Four samples of the projects were selected and analysed.

4.5.1 Questions asked

The selected four research reports addressed different problems. In one report the student investigated: "The effectiveness of using Teacher-Explanation-Demonstration Method in the Teaching and Learning of Accounting at (X) High School". One research objective focused on whether the use of the method promoted understanding of the subject. The second research objective as stated aimed at finding out whether the use of the method enhanced learners' memory. For data collection questionnaires were administered to the students and the teachers were interviewed. However, the interview schedule has not been included in the report although the research indicates that the interview was concerned with the teachers' perceptions of her practice. The items of the questionnaire are based on the learners' feelings about the student teacher's classroom practice.

The analysis and interpretation is based on the data from the questionnaire. The findings of the report reveal that the learners liked the student teacher's method of teaching because she explained concepts and demonstrated procedures for solving accounting problems before giving notes or assigning problems for learners to solve. Similar findings are reported from analysis of the data from the teachers indicating that the student teacher employed techniques which enhance learning and that she took time to explain concepts and principles of the subject to students.

Another report focuses on motivation - the topic being: "Lack of Motivation Among the Form A2 Religious Knowledge Students." The study addressed two research questions which focus on the learners' lack of interest in the subject and how motivation in the indicated class level can be improved. Questionnaires have been used for data collection. There were two questions for the learners and three others for the teachers of religious education. The questions for the learners are about whether the learners like the subject or not and about why they disliked or liked the subject. For the teachers the questions involve issues on whether they ever used corporal punishment and why. Another question is on how they think they can promote the students' motivation.

Analysis of the data was based on the data from the questionnaires. Findings reveal that the learners disliked the subject because of the methods of teaching employed to teach the subject. This is explained to show that the learners indicated that the regular teachers did not teach them and they only assigned exercises as class-work or homework. Findings from the teachers' questionnaires showed that some teachers used corporal punishment because the major problem in the school was a lack of discipline. The findings indicated that the teachers explained that the learners were not interested in their studies and that punishing them was the only way to force them to study. In relation to how motivation could be promoted it is indicated that the regular teachers raised this as the major problem as the administration is not supportive in this regard.

The focus of the third report is the: "Effectiveness of Dramatisation Technique in the Teaching of English Literature". The hypotheses of the report are concerned with whether dramatisation technique threatens students' participation or not and whether

random picking of students to carry out a reading task serves as negative reinforcement to answering questions. The report stated, under methodology section: "This study was classroom based and the data was collected on a daily basis through self-evaluation at the end of every teaching period" (ST16, 2001:2). A subsequent paragraph with the heading, "Data Collection Technique" reads: "A questionnaire was prepared and administered to forty-eight Form D students. Another questionnaire ... given to the teachers..." (ST16, 2001:2). The questionnaire items include questions on learners' feelings about the student teacher's questioning techniques and methods the learners prefer for teaching drama.

Findings from analysis of the data collected through the questionnaires showed that dramatisation technique created a warm and conducive learning atmosphere. A high percentage of the learners felt that being asked to act out a given part in a scene encouraged them to read ahead of the teacher thereby motivating them to participate in class. However, a low percentage showed that some learners felt uncomfortable and threatened by the practice. The findings also showed that the learners preferred group discussions to other methods. The latter included teacher-dominated presentations, discovery and question and answer.

The topic in the fourth report is presented as: "The use of the question and answer method to engage students in participatory learning so as to solve the problem of monotony and ineffectiveness when teaching English at form A level" (ST14 2001:2). One objective of the study was concerned with investigating whether the active involvement of students in the learning process through the use of the question and answer method breaks monotony in class. The second objective focused on assessing the extent to which the use of the method enhanced comprehension in English in the form A class. Instruments for data collection involved self-evaluations and observations. However, with observation the student researcher explained that the observations were her observations of the learners' body language as she taught in class.

Analysis of the data reveals that in most self-evaluations the learners participated enthusiastically in lessons and that the student teacher was able to achieve most of her objectives. It is also indicated that performance in the subject improved, shown by

some tests given to learners on some topics covered by the student teacher. Discussion of the findings illustrated that learners enjoyed participating in class. The student researcher concludes that question and answer promotes learners' interest in a subject and that the method is effective for teaching English language.

4.5.2 Format

All the research reports followed the format laid down in the teaching practice handbook. This is in the form of six chapters mainly, introduction, short literature review, methodology (action research-oriented), data analysis, conclusions and recommendations (for details see Appendix D).

In all the four reports the first chapter presented a brief outline of the exploration of the environment from which the problem was identified. Except for the report on motivation the exploration in the other reports focused on the classes on which the research was conducted. In the report on motivation the student research focused on the lack of motivation and the problem of discipline in the whole school. Discussions of the observations also showed the rate at which the behaviour observed occurred. The students ST08 (2001:3) wrote: "... most of the time we went to class, the teacher asked the students to do an exercise in the textbook or else she gave notes without explaining them." In addition two other reports indicated how often the behaviour observed occurred during their visits to the class. It is only in the report on motivation where the students only wrote the problem she observed.

Two reports covered a section on how the problem affected their teaching by mentioning that it destabilised their teaching. The details explaining the way in which the problem affected their teaching were not included. The other two reports did not cover this section. Apart from these the four reports covered the statement of the problem, research objectives/hypotheses, purpose and significance of the study.

The literature reviewed in all the reports analysed is based on the theoretical discussions of the phenomena researched. In relation to the chapter on methodology three reports indicated that the research is action research. The other report stated: "This study was classroom-based and the data was collected on daily basis through

self-evaluation at the end of every teaching period” (ST16 2001:11). Details of the classes being researched together with instruments used to collect data were presented in all the four reports. How the students analysed the data and their findings is presented in the next section.

4.5.3 Common features

All the projects that were analysed revealed that the students went through fact finding at the initial stages of their researches. One student, ST16, observed the teacher during the first two weeks of observation and realised that the learners did not volunteer to read in class. The student wrote: “The students looked puzzled when asked questions and none of them would volunteer to read, even when requested indirectly by the teacher” (ST16, 2001:2). This led to the student’s interest in trying out dramatisation as way of teaching drama in literature in English in the school. Another student explained that the purpose of her study was to find reasons for Religious Studies learners’ low morale and lack of interest in their studies. The student researcher explained that:

This discovery was made by the researcher on two consecutive visits to the class during the observation week and it continued well into the researcher’s initial teaching period (ST13 2001:1).

The student explained that she observed that discipline was the major problem in the school as learners were not punctual for classes and were not serious about their studies. Another student also realised through the observations that the learners seemed passive and bored during English lessons. She explained:

I realised in all the five times that I went to her class that she mainly used the lecture method of teaching ...most of the time students just stayed passive and listened to her...It was after this realisation that I decided that I did not want my lessons to be like hers (ST14, 2001:2).

The student explained that she decided to try question and answer in order to enhance participation in class.

The last student mentioned that she was puzzled to find that her tutor relied on giving learners notes to study accounting. The student also indicated that sometimes the notes were given to one of the learners to write on board while others copied the notes. In addition the student indicated that most of the time the learners were given exercises from the textbook to work out on their own. On inquiring about this practice the student learned that the tutor believed that the learners were competent to solve the problems since most of the topics included what they had covered at Junior Certificate level. This was a Form D class. Contrary to the explanation the student observed that:

... whenever the teacher asked the learners to complete double entry from given transactions they always copied from solution worked out in previous lessons ... They were always turning pages to identify a similar problem from exercises done in previous lessons (ST08 2001:1).

The student concluded that she decided to employ teacher-explanation-demonstration in her teaching. In all the documents that were analysed the report reveals reconnaissance at the initial stage of the research process.

In three of these reports instruments used for data collection included questionnaires and interviews administered once towards the end of the teaching practice. In the other report the data collection was through self-evaluation and observation. According to the student teacher's explanation the observations referred to observations by the student of the learners' behaviour in class. Analysis of the data in the reports included tables illustrating frequency in the occurrences of a phenomenon. Even the student researcher who analysed self-evaluations employed quantitative analysis, citing as evidence the quantity of the self-evaluations that testified to her assertions. In all the reports findings are presented in one or two statements indicating general findings of the research. Thus, student's practices and their effects are presented in a general form as student ST14's findings illustrated:

... the analysis of the self-evaluations which I did after every lesson indicate that the use of the question-and-answer method had a result of making my English lessons interesting. Thirteen out of a total of twenty-one self-evaluations I did indicate that my English lessons were interesting because students were actively involved in the lessons. Examples of these self-evaluations are of lessons dated ...(ST14, 2001:8).

Another student explained her findings with: “The results show that the students liked the teacher because she explains Accounting concepts and procedures” (ST08 2001:11). After indicating that the learners’ performance improved she concluded that: “Teacher-explanation-demonstrations is an effective method for teaching Accounting” (ST08 2001:12). An excerpt from Student ST16’s research report also illustrate the research findings:

The result shows that 95.8% of the students liked being pointed out to act, while 87.5% felt more comfortable with group discussions and few of the students liked lecture method while questioning proved favourite with 83.3% compared to discovery with 16.4% (ST16 2001:15).

The fourth report also present findings by indicating the percentage of students who did not like Religious Studies was 86% and that of the students who liked the subject was only 14%. The presentation also included explanation of reasons for the learners’ attitudes including teachers’ attitude towards corporal punishment. Thus, in all the reports the presentation is synthesised into an overall picture of the findings.

4.5.4 Understanding of the action research and evidence of reflective practice

Analyses of the research reports were based on Stevenson’s (1991) guidelines for evaluation of action research projects. Stevenson’s guideline identifies as first, a stage that incorporates a brief description of the initial analysis the action researcher conducts prior to planning the first action in order to address the general concern. As the author indicated this stage, sometimes referred to as reconnaissance, may have been conducted at an initial stage and have resulted in the identification or articulation of the problem. As indicated in the above analysis all the reports demonstrated a study of the environment from which the research problem was derived.

However, the details concerning this stage which involve examining the facts in order to show opportunities and constraints the students faced, are missing from the documents. Also, the projects did not have the action plan for the first cycle. Elaborating further on this aspect, Stevenson (1991) explains that the project should include an outline of the plan of action in which the students distinguish between the overall objective of their projects and the specific objective of each of the first cycle. The reports only show the overall objectives of the projects and the action plan for the whole project in the form of the purpose of the reports. Analytical action plans from the overall plan illustrating the action plans of each cycle as Stevenson (1991) suggests are missing. An account of how the students monitored the implementation and effects of their plans in each cycle they completed could not be identified as the findings indicated only the summary of the results. The evidence on the circumstances and consequences of their actions has not been included in the summaries.

All the reports on various aspects of the problem researched are based on the overall pattern that emerged from analysis of all the data. The path that illustrates the twists and turns on the way and how the final result was obtained were not incorporated in the projects.

The focus of the chapter has been on the analysis of the data. The section that follows presents discussions of the findings.

Chapter 5

Discussion of the Results

This chapter presents discussion of the results in relation to the research questions for this study. The previous chapter has presented the data obtained as a result of the focus questions of this research, namely

How are action research and the action research project perceived and experienced by the students and teacher educators at NUL?

What are the factors which facilitate or impede the success of the action research project on teaching practice?

Discussions of the results in this study will be centred on these two research questions.

5.1 Students' and teacher educators' perceptions and experience of action research

Action research refers to research undertaken by a practitioner into his/her practice. Most scholars cite and adopt the definition of action research suggested by Kemmis (1988). The definition describes action research as a form of 'self-reflective enquiry.' None of the definitions provided by the students revealed this aspect of action research. The instruments they used to collect data indicated a lack of understanding of the research approach. Most definitions revealed more of what can be achieved with action research than what it is. Descriptions such as research undertaken to test methods or techniques of teaching, to improve classroom practice or solve classroom problems tell us what the object of the research is not what it is. Only three students were able to describe it as research undertaken by the practitioner while in practice although the emphasis of 'self-reflective practice' was left out.

Analysis of the LASED teacher educators' perceptions of action research showed an understanding of what the research approach entailed. The educators were able to explain what action research is and what it involves. Evidence also indicated the educators' failure to describe how they determine student teachers' research activities during teaching practice. Only one lecturer mentioned examination of students' diaries and self-evaluation of the lessons conducted. It is important to note that the educator qualified the response with an indication that other constraining factors such as time and understaffing restrict such supervision activities. Other teacher educators also mentioned that limited resources pose problems in the supervision of both the teaching practice and action research. Minnis (2000) and Zeichner and Liston (1987) indicated limited resources in terms of time and personnel as some of the contributing factors to the failure of action research in teacher education. The other educators, as the evidence shows, pointed to helping the students to identify the topics as the main activity associated with determining whether the students were engaged in action research while on teaching practice.

In addition to limited resources and the apparent lack of supervision of the students' research activities evidence also indicated that the students are not adequately prepared for the research project. Both teacher educators and the students indicated that there was no specific course designed for action research. The students were introduced to elements of the research approach within methods courses. This means that time allocated to the teaching of the research approach was limited. Both parties also explained that practical activities that could highlight application and enhance an understanding of action research were not possible within the limited time constraint.

In a paper discussing constraints and opportunities in teacher education, Burton (1999) argued that professions organised around multiple subjects experience a lot of problems. He explained that student teachers at the universities prepare for their careers by training in subjects departments, whereby "... the subject preparation takes priority in importance and time. Students spend more time in the content departments than they do in the school of education concentrating on pedagogy" (Burton 1999:353). Stuart (1987) observed in her study that the time factor constrained teacher educators' activities.

Given the problem of time, the students were introduced to the theoretical aspect of action research only. The students also explained that this theoretical aspect covered only the format of the report without going into details of what each aspect involved. Avalos (1997), although focusing on methods courses, also identified limited time as the cause of inadequate teacher education programmes. Her study was on teacher education programmes in countries that included Papua New Guinea, and the Philippines. The author concluded that because of the limited time, teacher educators frame curricular which:

... seem to be organised as a pot-pourri of educational “academic” knowledge or a Cook’s tour of the school curriculum and provided limited practical teaching experience (Avalos 1997:79).

Constraints such as limited time frames within which teacher educators are expected to prepare students were also found by Noffke and Brennan (1991) and Stevenson (1991).

5.2 Factors facilitating or impeding the success of the action research on teaching practice

In discussing the results in this section, I will use the information gained from the literature review in chapter 2 and consider these results against the framework of the major themes presented in section 2.7:

- (i) A constructivist’ view of knowledge
- (ii) Degree of researcher freedom in schools
- (iii) Development of reflective practice

5.2.1 A constructivist’ view of knowledge

According to the findings in this study the structure of the NUL B.Ed. programme shows theoretical underpinnings of the constructivists’ view of knowledge. The programme is structured in a way that could facilitate fulfilment of the assumptions on which constructivism is based. Incorporation of action research in the methods courses represents a positive act toward this end. It requires a shift from a traditional

view of the nature of knowledge and knowing of professional knowledge. In addition, action research itself creates an opportunity for the students to learn from practice. Emphasis on the observations, including the apparent clinical supervision theory embedded in the planned structure of these observations and self-evaluations, provide an opportunity for the students to reflect on their practice. Lastly, the peer meetings provide forums for students to discuss their research activities together with preliminary findings. Thus it is concluded that these aspects of the programme reflect views of learning in line with constructivism.

Discussion of the results however revealed that most of these structures have been established for teaching practice purposes. There is a noticeable pressure arising from the Faculty in the form of teaching practice requirements and supervisors' expectations. Consequently students become anxious to meet the requirements and satisfy the supervisors' expectations. This is illustrated in the discussion of the role of observations, teaching practice and the project assessment on the research project.

There is evidence of a good working relationship between the regular teachers and the student teachers and willingness on the part of the teachers to help. The assistance, though, did not involve observing the students as a good number of the students explained that the teachers were reluctant to observe the students and to be observed.

It appears that teachers are reluctant to participate in teaching practice activities that are perceived by training institutions as crucial in the education of a teacher. Such activities include the NUL teaching practice tutors' observations. A study conducted by Zeichner and Liston (1987) reported findings similar to this observation.

Davies (1997) also conducted a study on the professional training of secondary English teachers in the specific context of internship. The focus of the study was on an action research project in which the students developed and investigated an element of a Post-Graduate Certificate in Education programme, the Versions of English strand. The aim of the project was to help beginning teachers to explore the nature of their subject for the purposes of secondary teaching. One way of achieving this was through encouraging the students to engage in a dialogue with teachers about

questions of different ways of conceptualising the subject in the secondary context. Reporting on the findings Davies (1997:36) writes:

The findings have also shown, though, how a central element of the planned activities – the open and sustained dialogue between students and teachers about various views of English – failed to take place.

The mentors viewed their role as being concerned with the provision of practical guidance and support despite considerable efforts by the tutors to extend this role. The reluctance has been reported as one of the factors that inhibit the effectiveness of the action research. Findings reported by Goodman (1985) also showed that teachers provide only practical guidance to students on teaching practice.

A few students who were observed showed that the observations were useful for teaching practice. This trend is also evidenced in the reports as none of the projects analysed is based on data collected through observations. The reports of the peer meetings also showed that there was virtually a complete lack of any reference to issues such as the students' teaching experience.

Findings on students' views on the impact of assessment of classroom practice during teaching practice also revealed other teaching practice requirements that students were anxious to fulfil. The majority of the students felt that the assessment did not affect their research activities. The students' anxiety about lesson plans, teaching aids, employing methods approved by supervisors and an urge to be teaching a new topic when observed, contradicted this view. The students' major concern seemed to be earning favourable remarks from the supervisors.

The comments indicated the emphasis that the Faculty places on performance in the pre-determined teaching skills, professional attitude and personal qualities illustrated in the teaching practice lesson assessment format (see Appendix C). The qualities showed a model associated with a technicist approach. In addition the comments provide evidence that suggests that adequate performance in these areas is considered to be of paramount importance when students are evaluated. Consequently, the action research project is suspended until the teaching practice requirements are fulfilled.

Noffke and Brennan's (1991) revealed similar findings indicating that such demands leave no time for the project.

The students' anxiety within the context of what is required for teaching practice raises what Zeichner and Teitelbaum (1982) referred to as survival-oriented concerns associated with behavioural models. They explain that the student teachers spent most of the time concerned with presenting a favourable image to college and school supervisors. In support of this view the authors cite findings of a study conducted by Gibson in which it was concluded that:

A good deal of what was reported done in the classroom was suggested as being done as a result of felt expectations from school or college rather than from personal conviction. The picture emerged of many students not really knowing what they were doing, but attempting to fulfill what they understood to be the prescriptions of school or college (Gibson in Zeichner and Teitelbaum 1982: 96-97).

Consequently, the need to satisfy the requirements of the training institution takes precedence over that of learning from practice.

Such models with their pre-determined behaviours cripple personal construction of meanings and understandings derived from practice which, as already indicated by literature, stifles the creativity required in action research (Stevenson 1991). Commenting on enquiry-based courses in pre-service education, Letiche (1988) observes that:

Curricular clarity has been bought at the cost of rigidifying learning. 'Proven' teaching techniques, standard lessons, can all now be developed. But we cannot marshal real personal resources in this manner! Enquiry may need facilitation and/or support, but it cannot survive when moulded into a preset curriculum (Letiche 1988:16).

Avalos (1991) arrived at similar conclusions in a study on teaching practice component of the training programme for teachers of primary schools in Papua New Guinea. Analysis of the curriculum and the directions given for the teaching practice in the study indicated that:

...emphasis is put on students showing evidence of adequate performance with regard to behavioural objectives stated more as the doing of things rather than the learning and understanding of contents and processes (Avalos 1991:174).

The authors conclude that thoughtful and reflective teaching does not become the major characteristic of such programmes when they are implemented in schools. They argue that students' primary concerns emerge as surviving the student teaching experience while they fail to see the teaching experience as a progressive step towards development of their professional competence. Findings in this study also show Zeichner and Teitelbaums' survival-oriented concerns and perspectives. The students were more concerned with the impressions supervisors had of their practices than what they believed to be worthwhile practices. This attitude however, runs counter to approaches that encourage students to test educational ideas out of their personal conviction.

The findings also show that assessment of the projects impacted negatively on the students' attitude towards the research project. Comments on the impact of the assessment of action research are more revealing as they show that the students write what they think would be pleasing to the lecturer rather than their personal experience. There is evidence that the students felt pressure to impress the teacher educators, which hindered the honest reporting of their actions in the classroom. Indeed Groundwater-Smith (1988) raised concerns regarding the counter-effect of assessment on inquiry-based courses such as action research in pre-service education. In the study in which student teachers used action research, Noffke and Brennan (1991) also reported that the assessment has a negative impact on students' attitude to the project. The researchers argue that: "...the grade supports the continuation of the students' understanding of schooling as individual and competitive, and affects their approach to projects, papers and sharing in discussions" (Noffke and Brennan 1991:199).

5.2.2 Degree of researcher's freedom in schools

Other factors considered in determining factors that impacted on the action research include curriculum decision-making processes and school organisational features.

There is an indication that the schools, through the regular teachers or the subjects departments, had complete control over the selection of the curriculum content for the teaching practice. Studies conducted by other scholars show similar findings (Goodman 1985, Zeichner and Liston 1987). One interesting trend shown by the results is that even for their daily lessons other factors, the university in particular, affected the students' decision on what to teach. The urge to impress the supervisors affected the students in different ways.

There is no direct evidence, however, indicating that the students were inhibited in their classroom methods by pressure from the regular teachers or heads of departments. Consequently, it could be argued that the students exercised relative autonomy on decisions concerning daily teaching/learning activities. There are a few instances where the regular teachers imposed their views on how lessons should be conducted. Even in such instances the students were able to resist the pressure to follow the regular teachers' methods. Given that the majority of (thirteen) students also attest to good working relations with the regular teachers, it sounds reasonable to conclude that the students could teach as they pleased. However, more than half of the students mentioned that practical aspects such as timetable, class size and resources sometimes inhibited their teaching. McKernan (1991) and Stevenson (1991) indicate that such organisational features play an important role as determining factors on teaching/learning decisions. Another striking observation is the amount of pressure exerted by the supervisors also on this aspect as some students indicated that they used methods approved by the supervisors.

In the case of timetable, single periods restricted the students to certain methods only, especially when this was combined with the amount of work they intended to cover. As a result, the majority of these students could not employ learner-centred methods of teaching. A high number of students also experienced problems with large classes where the major problem raised was marking, as it was reported as being time-consuming. Only a few students mentioned problems with resources, in particular textbooks and availability of teaching aids. These seemed to have restricted the students to a few methods. In sum there is some indication that the students were not completely free to design the daily teaching/learning activities as their professional

judgement would suggest. Educational theorists argue that autonomy and control over curriculum issues is restricted in the teaching profession (McCulloch *et al* 2000). However, the students could to some extent manipulate the situation to conduct their research.

About half of the students expressed autonomy and control over matters concerning assessment. However, a close scrutiny of the results indicates a number of external factors influencing their decisions on this matter. Fixed timetable, class size, regular teachers' expectations and school policy, although not acknowledged by the students, were found to be influential on the students' decision-making processes.

In general, although restricted, evidence shows that there was still room for the students to test their theories in practice. The schools seemed open to allow students to implement their innovations in practice. Except with observations, the staff members of the school were also willing to assist in every way possible.

5.2.3 Development of reflective practice

There is no evidence indicating that the student teachers engaged in reflective practice. Reconnaissance as an on-going practice carried out throughout the stages within one cycle and also between the spiralling cycles of action research could not be identified from the projects. This involved evaluations, on the basis of effects of the previous events, the now and implications on the events to come, hence reflection. None of the projects analysed, however revealed this movement pattern. Only one project might have shown an aspect of reflection from the self-evaluation forms, however the report was in general form, not revealing the cyclical movement pattern. The other three projects represented a general survey on issues raised by the students with no trace at all of reflective practice. This is not surprising given the kind of data collection instruments used and the data collected.

A detailed analysis of the projects as suggested by Stevenson's (1991) guideline also showed the projects lacking in many respects as action research projects. An analytical presentation of the aspects of action research project as revealed by the guideline is presented.

- **An identified problem, reconnaissance, outline of the first action plan**

The stage involves reconnaissance at the beginning of a research in order to identify a problem. All the projects revealed fact finding undertaken by the students as they identified their problems for the project. Thus their problems arose from practice. However analysis of the situation to reveal opportunities and constraints and a course of action devised from the analysis was found to be missing from the projects, hence no first action plan in any of the projects.

- **Account of action and observations**

This constitutes the second stage of action research as described by Hopkins (1985) and McNiff (1988). As revealed by the analysis of the data, it is in only one project where the practice of the student teacher was alluded to by way of referring to her self-evaluations. A detailed account describing the events in each lesson has been omitted. In two other projects the student researchers only indicate their decisions of the course of action without indicating either detailed plan of action of the decisions or how they were implemented. Thus statements such as “ I decided to use teacher-explanation-demonstration in my lessons” and “I decided to use dramatization in my teaching of drama in Literature in English” only give us a hint of what the student teacher intended to do without indicating how it was carried out. In other words observations of the students’ lessons have been completely left out from the reports. In other words the stages of planning, acting, observing and reflecting in a cycle of action research as described by Hopkins (1985) and McNiff (1988) could not be identified from the projects. This is not surprising as three of these students used interviews and questionnaires conducted only once during the teaching practice period. The methods only reveal learners’ and regular teachers’ perceptions of the student teachers’ practice without an analysis of the practices.

- **Evaluation of the first action plan, and implications for the next action plan**
- and - An account of re-planning second action step, revisiting previous points**

These have been combined because they result in the cyclical movement steps of action research as described by McNiff (1988). There was no indication of this movement pattern in all the projects that were analysed. The omission of the plan of action for the first cycle and its observation leaves no space for neither the evaluation of the plan nor the implications for the next plan. Thus an account of re-planning of the second action step and revisiting previous points was out of question in the absence of the preceding stage. Only an overall account of the whole project with two projects reflecting the perceptions of learners and teachers in school on their teaching, one based self-evaluation and the fourth with no relation to the student's practice.

- **Critical reflection on the project as a whole including comments on the effects on the student teacher's professional practice**

All the projects showed conclusions based on the findings which do not necessarily mean that these were based on critical reflection. Three of the students researchers concluded that the methods and techniques tested were effective mostly in the sense that the students liked the methods adopted by the student researcher. The fourth only reported the cause of the low morale among learners in the class in which the research was conducted. In general the conclusions drawn in projects are not based on the students' professional growth. Discussion of critical reflection will be presented on the basis on findings from the study as a whole not necessarily on the analysis of the projects.

However, purposes of action research mentioned by the students and what they explained as benefits derived from the research suggests reflexivity. For instance, development of problem solving skills, sharpening awareness skills, together with having learned to adapt and discovering the best methods indicate achievements that can only be reached through reflective practice. The reflection might not have been rigorous and documented, but it can be traced.

In general there is no indication from the findings that the NUL action research promotes reflective practice. Because of the limitations of this study it should be borne in mind however that the results are not conclusive. It is also important to note that the students drew and completed self-evaluations for their daily lessons submitted with the lesson plans for teaching practice file. There is no indication that they were encouraged to synthesise these evaluations in a complete form by incorporating it in the research report, which would enable them to personalise the new found knowledge. It has already been indicated that even the peer meetings, which could have reinforced the reflections, were not regarded as forums where findings or research proceedings can be shared.

Evidence indicated that the spiralling cyclical action steps illustrating continuous reflections on one's practice was missing from the students' projects. The projects failed to reveal a thorough reflection and evaluation of the students' experience against the background of their own beliefs and assumptions about teaching/learning.

The above presentation illustrates the extent to which the findings addressed the issues raised in the research questions. The next section presents conclusions based on these findings as an attempt to try and draw a thread running through the whole study.

Chapter 6

Conclusions and Recommendations

The data revealed that when analysing action research within a teacher education programme, we are looking towards the explanation of the nature and relation of parts and wholes, structures and functions. Such was found to be the case with the NUL action research course. While reading and analysing the transcripts, a comment by one of the students in relation to the observations by the regular teachers, ‘...they do observe us, but the observations are for teaching practice’ struck a chord in me. I realised then that I was not looking at a unit or a component of a teacher education programme, but a whole system of interrelated and interdependent parts. Analysis for such dynamic learning activity, therefore, demands borrowing from and an application of systems’ concepts. Letiche (1988) adapts Ackoff’s description of a system, and he explains that a learning system would have to display three properties. The properties are presented below:

- (i) the properties or behaviour of each element of the set have to have an effect on the properties and/or behaviour of the set as a whole;
- (ii) no part can have an independent effect on the whole and each is affected by at least one other part;
- (iii) and the elements cannot be organised into independent sub-groups – all sub-groups interact and each affects the performance of the whole (Letiche 1988:22-23).

The author concludes that learning is a process whose phases are a part of a larger, interrelated system.

6.1 Conclusions

The aim of the study was to examine the extent to which the factors in the environment in which action research takes place in the NUL B.Ed. programme facilitate student teachers’ research activities. Conclusions drawn in this study are discussed with the following points in mind. The sample of 18 students for a

population of 152 is small and only four research project from the sample were analysed. It was not possible to include the constituency of teaching practice tutors and observations were not possible at the time of data collection.

Despite these limitations in the methodology, the findings indicate a lack of understanding of action research by the students and also lack of research skills in general. Hence it can be concluded that the students are not adequately prepared for the research project and therefore have a limited understanding of the research approach. This is illustrated in the completed projects, which do not reflect action research projects at all. Based on the further discussion of the results I can conclude that there is no supervision of the students research activities. Comments by the students indicate that they were honest and determined to carry out good quality research but had no guidance especially as even their programme did not prepare them adequately for the task.

It is also observed that limited time and understaffing restrict supervision of the project. Although lack of resources are identified as limiting factors for effective supervision of the project, a close examination of the course indicates, however, that this is not case. Available Faculty resources in terms of time and manpower seem to be devoted to supervision of the teaching practice. There is evidence which indicates that the supervisors expected the students to satisfy the requirements for teaching practice while neglecting those of action research. Thus fulfilling the teaching practice requirements occupied most of the students' time. The conclusion reached therefore is that emphasis on teaching practice issues constitutes a major cause of the failure of the research project.

It can also be concluded that the schools are supportive of the students' research activities. There seems to be a lot of support from the regular teachers. Failure to observe the students and to discuss their research activities can be attributed to the fact that the students themselves undertook to do the research after the teaching practice. On the whole the teachers seem to be co-operative and very supportive. The limited autonomy and control over curriculum issues is borne out of the nature of the profession. Scholars have indicated that every profession, inclusive of teaching has a bounded jurisdiction (McCulloch *et al.* 2000). It has already been indicated that there

is always a relative freedom within the jurisdiction. However, autonomy alone does not suffice for a successful action research.

Examination of the projects also revealed a lack of reflective skills. However it cannot be concluded that action research failed to develop the students' reflective skills since there is no evidence that they undertook action research. Reflective skills that were implied in their description of benefits gained from engaging in action research cannot be attributed to the project.

Three aspects or elements that affect action research were identified in the study. These involve how the students are prepared for the action research project, which for the sake of emphasis on systems thinking has been referred to as preparatory support system. Two equally important aspects of action research refer to the supervisory support system and the schools support system. Such parts were identified in the study after reflection on the reviewed literature, which seemed to present the various aspects of action research as separate entities. Findings indicate that there is lack of co-ordination between the teaching practice activities and the action research. Goodman (1991) notes that there are many contextual factors that may inhibit the success of the inquiry based teacher education programmes. Consequently as the author explains, promoting reflection and inquiry among preservice teachers during their professional preparation can be challenging. Thus, she concludes:

In order to have a more meaningful impact upon future teachers, this orientation (promoting reflection and inquiry) needs to be the focus of seminars, supervision, foundation courses field experiences and methods courses. Without coordinated effort among each component of a given teacher preparation programme, our efforts to prepare more thoughtful and active teachers will be severely limited (Goodman 1991:74).

In summary we conclude that an effective action research course is one that recognises the interrelationship and interdependence of the parts that surround it, which when combined together form a complete whole.

6.2 Recommendations

This study focused on a small part of the NUL teacher education programme. A study of the programme examining it in total is likely to provide a more comprehensive picture of the environment surrounding action research and its effectiveness in teacher education programmes. In addition, being a case study, the findings cannot be generalised to teacher education programmes in general. More studies on this issue are needed before any general conclusions are drawn.

The findings suggest that training and supervision of the action research project at NUL was weak. There is also an indication that running the project within a technical model of teaching practice constrains the effectiveness of action research. In order for the action research to have a significant impact it should be considered in relation to the teacher education programme as a whole and the environment in placement schools. Also the established structure for the teaching practice could be effectively used for purposes of the action research if the requirements for the teaching practice are replaced with the action research project.

Even though there is an identified lack of resources, the teaching practice seems to have been successfully supervised. Part of the explanation for the emphasis might be based on an urge to help the students to do well in practice. On the other hand advocates of action research argue that it improves practice. Perhaps part of this anxiety could be avoided if the energy and time is diverted to the research project, which has the potential to improve practice, thereby taking care of the practice.

The recommendations of this study are as follows:

- Incorporation of action research is a move towards a right direction in facilitating inquiry-based courses but the identified time constraint suggests a review of the programme is needed so that more time is allocated for methods courses.
- More time and space is needed for practicums. These should include practical activities engaging the students in different aspects of action research.
- A research methods course is needed to introduce the students to research skills

- The assessment of the teaching practice as whole should be reviewed so that requirements like observation, reports on peer meetings, lesson plans and self-evaluation are incorporated into the action research project.

Further research needs to be carried out to examine the extent to which the students demonstrate reflective practices. This issue was explored through an analysis of the students and the lecturers' views on the issue and through an analysis of the students' projects. However, a more detailed study incorporating observations on this issue is needed. Lastly, in the light of the inefficiency identified in some of the sub-systems of the programme, the preparation of the students for the project, supervision of the project and the environment in which the research is conducted, should be looked at in total for a successful venture of the action research at NUL. It is also necessary to examine the effectiveness of action research in cases where the various aspects of the course are co-ordinated as a complete system.

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Appendix A

LASED: Teaching Practice Mark Record

1. T.P. Project Report - to be marked by Subject Tutor.
2. T.P. File - to be marked preferably by the Subject Tutor.
3. T.P. Final assessment to be on 3 items as shown below.

FINAL MARKS: TP FILE + TP ASSESSMENT ÷ T. ACTION RES. REPORT

[illegible]

Appendix B

RECORD OF DISCUSSION
BY A STUDENT TEACHER AND A SUPERVISOR
AFTER THE DISCUSSION OF AN OBSERVED LESSON

NAME of Student Teacher: _____

NAME of Tutor: _____

SCHOOL: _____ SUBJECT: _____ CLASS: _____

DATE: _____ TOPIC: _____

FOCUS OF THE OBSERVATION: _____

1. Students Good Points

2. Points for Future Attention

3. General Remarks

STUDENTS Signature: TUTOR'S Signature:

Appendix C

FACULTY OF EDUCATION - NATIONAL UNIVERSITY OF LESOTHO TEACHING PRACTICE LESSON ASSESSMENT FORMAT

A Lesson Planning and Content (before teaching)

1	States objectives precisely and comprehensively	0	1	2	3	4
2	Divides the lesson in logical steps	0	1	2	3	4
3	Relates lesson steps to stated objectives	0	1	2	3	4
4	States the lesson content clearly	0	1	2	3	4
5	Summarizes the lesson content appropriately	0	1	2	3	4

B Lesson Presentation

1	Uses pupil activities related to objectives	0	1	2	3	4
2	Shows variety in teacher and pupil activities	0	1	2	3	4
3	Ensures pupil involvement	0	1	2	3	4
4	Uses teaching aids / illustrations/ examples	0	1	2	3	4
5	Demonstrates organized blackboard / laboratory work	0	1	2	3	4

C Communication Skills

1	Uses language which pupils can understand	0	1	2	3	4
2	Speaks clearly and audibly	0	1	2	3	4
3	Uses question techniques efficiently	0	1	2	3	4
4	Demonstrates a clear knowledge of the content	0	1	2	3	4
5	Interacts efficiently with pupils on the content of the lesson	0	1	2	3	4

D Classroom Management

1	Is aware of what happens in class	0	1	2	3	4
2	Demonstrates leadership qualities	0	1	2	3	4
3	Has an eye for individual pupils	0	1	2	3	4
4	Makes sure that pupils are following	0	1	2	3	4
5	Uses teaching methods / techniques flexibly	0	1	2	3	4

E Qualities of the Teacher

1	Demonstrates knowledge of his/her pupils	0	1	2	3	4
2	Has a presentable personal appearance	0	1	2	3	4
3	Motivates pupils	0	1	2	3	4
4	Demonstrates creativity and innovativeness	0	1	2	3	4
5	Makes purposeful movements	0	1	2	3	4

Number of circles						
Multiply by	X	X	X	X	X	score
	0	1	2	3	4	e
Products	0	+	+	+	=	
	+					

For the assessment a five point scale is used:

- 0 = inadequate
- 1 = poor
- 2 = adequate
- 3 = good
- 4 = excellent

It is assumed that the lesson is a typical, standard lesson and all skills in the list can be observed. The lesson should not be a revision or test. Therefore, there is no 'not applicable' option.

This form is to be used for a pre-arranged assessment lesson, which the Student Teacher has prepared on his/her own.

The Student Teacher must show his/her lesson plan before the lesson.

The Tutor and Faculty of Education Staff compare their assessments and make adjustments if necessary.

At the end of Teaching Practice all Student Teachers should score a pass (2 or 3) in all skills.

In Section A the highest score is 20 points

In Section B the highest score is 20 points

In Section C the highest score is 20 points

In Section D the highest score is 20 points

In Section E the highest score is 20 points

TOTAL 100 points.

The final evaluation schedule is as follows:

- Excellent -> 75 points
- Pass -> 50 - 75 points
- Fail -> <50 points

Name of Student Teacher: _____

first name SURNAME

Subject: _____

School: _____

Class: _____

Date and Time: _____

Name of Supervisor: _____

first name SURNAME

SCORE: _____ Signature of Supervisor : _____

D. GUIDELINES FOR THE TEACHING PRACTICE PROJECT REPORTS FOR LASED.

Instructions:

- (a) You are expected to write two project reports, one in each of your teaching subjects;
- (b) Each report must be based on a problem/task/experience that you encountered during your teaching practice in the relevant subject area;
- (c) The problem/task/experience you select as your topic for Action Research should come from the following areas:-
 - (i) Lesson planning, content, drawing scheme of work and/or the facilities available
 - (ii) Classroom interaction
 - (iii) Student Teacher-Tutor and/or Student Teacher-Pupil relationship;
 - (iv) The total teaching environment
- (d) All your information should be based on careful and systematic observation done on the problem identified.

Report Format

1. Introduction

- 1.1 A good and clear explanation of how you identified the problem/task/experience;
- 1.2 The scope of its recurrence during the teaching practice period;
- 1.3 How the problem affected your teaching practice experience;
- 1.4 The (reasons) of the research and its significance (value) to knowledge and profession.

2. Short Literature Review

- 2.1 Outlining and discussing some of the relevant and supportive points you have read and related to the problem(s) you identified and observed;
- 2.2 These points can help you to justify your analysis/discussion/ interpretation of the information collected;
- 2.3 The points from your literature review can also be used to support your conclusions and recommendations.

3. Methodology (Action Research-oriented):-

- 3.1 * who were used (population and sample) for this research.
- 3.2 An explanation of the systematics means of observation (instruments) you used to collect your information.
- 3.3 The sources\circumstances\issues you examined to enable you to get the relevant information;

- 3.4 Whether or how you discussed the issues around your problem(s) with school staff\ tutors\NUL Staff etc
4. Data Analysis
- 4.1 Systematic explanation (possibly with illustrations or examples) of the information collected on the problem(s)
- 4.2 While explaining, discuss and make your interpretation of the information or issues around the problem(s)
- 4.3 Demonstrate whether you were able to find solutions or not to the problem(s)
5. Conclusions
- 5.1 Outline and explain what you conclude from all your explanations\ discussions\interpretation of the information;
- 5.2 All your conclusions must be based on the information dealt with and not from outside it.
6. Recommendations :-
- 6.1 You may want to suggest to people who read your report useful ways and means of dealing with such problem(s) if encountered;
- 6.2 All your recommendations must be based on the information\ issues\experiences etc. discussed.

NOTE :-

The length of the project report is flexible, but of a minimum of 10-12 handwritten pages.

Appendix E

Student Teacher Interview Schedule

Name of Student Teacher.....	
Teaching Experience (Number of years)	
Name of School (Placement for teaching practice)	
Subjects Taught and Class level	
Qualifications	
Gender:	Male <input type="checkbox"/> Female <input type="checkbox"/>
Age	<input type="checkbox"/>

SECTION A

1 (a) Who decides on what you teach on each lesson on teaching practice?

.....

(b) Who decides how you teach your classes on teaching practice?

.....

(c) Who decides on assessment of what you teach on teaching practice?

.....

2. (a) What factors on teaching practice influence

(i) What you teach?

.....
.....
.....

(ii) How you teach?

.....
.....
.....

(iii) How you assess students' work?

.....
.....
.....

(b) How did the following affect your teaching practice?

(i) The timetable.....

.....
.....
.....

(ii) The class size

.....
.....
.....

(iii) The amount of work you are expected to cover within the teaching practice period.....

.....
.....
.....

(iv) External Examinations

.....
.....
.....
.....

(v) Other

.....
.....
.....
.....

SECTION B

1. (a) How would you describe action research?

.....
.....
.....
.....

(b) What do you think is the purpose of action research in the B. Ed. programme?

.....
.....

2. (a) List the courses from the B.Ed. programme you think focus on preparing you for the action research?

.....
.....

(b) Why do you think the courses focus on action research?

.....
.....
.....
.....

(c) How would you describe the method of teaching employed in these courses?

(i) Would you say it is learner-centred or teacher-centred?

.....
.....

(ii) To what extent does the method encourage discussions and sharing of ideas?

.....
.....

(iii) Is it characterised by activities that provide learners with opportunities to experience classroom practice, e.g. simulations, peer teaching, etc.?

.....
.....

3. (a) How were you prepared for the action research? Explain

.....
.....
.....
.....

(b) Do you think the preparation for the action research was adequate? (i) If yes explain how?

.....
.....
.....
.....

(ii) If not what was lacking?

.....
.....
.....

4. (a) How did the grading of the research project affect you? Explain

.....
.....
.....
.....

(b) How did the assessment of TP affect your action research process?

.....
.....
.....
.....

5. (a) Do you think your practice improved as a result of engaging in action research on teaching practice? If yes in what way did it improve?

.....
.....
.....

(b) If not, what were the problems?

.....
.....
.....

SECTION C

1. a) How would you describe your relationship with the subject teacher on TP? Explain

.....
.....
.....

b) How would you, also, describe your relationship with the rest of the staff members on TP? Explain

.....
.....
.....
.....

c) How do you think the relationship described in the two instances above affected the action research?

.....
.....
.....
.....

2. (a) What did your subject teacher think about action research project?

.....
.....
.....

(b) What about the other staff members?

.....
.....
.....
.....

SECTION D

1. What factors helped you with the action research project on teaching practice?

.....
.....
.....
.....

2. What factors hindered you with the action research project?

.....
.....
.....
.....

University of Cape Town

Appendix F

Teacher Educator Interview schedule

Name of Lecturer
Course(s) Offered
Number of Students Registered for the Course(s)
Number of Years in this Institution

SECTION A

1. What do you understand by the phrase, action research?

.....
.....
.....
.....

2. What do you think is the purpose of action research project in the B.Ed. programme?

.....
.....
.....

3. (a) How can you tell if a student teacher is engaged in action research on TP?

.....
.....
.....

- (b) How can you tell, from the project if the student has engaged in action research?

.....
.....
.....

SECTION B

4. (a) Do you offer any courses that focus on preparing the student teachers for the action research project?
.....
- (b) Which are the course(s)?
.....
.....
- (c) What is the structure of course(s)?
.....
.....
.....
5. (a) Do you involve your students in the planning of the following aspects of the course(s)' curriculum?
- (i) The course outline
.....
- (ii) Teaching and learning activities
.....
- (iii) And assessment
.....
- (b) Explain why you involve or do not involve the students in curriculum planning
.....
.....
.....
6. What experiences do you engage student teachers in, in preparation of the action research?
.....
.....
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7. Does the structure of the programme

(a) Allow you to use discussions during the course(s) lectures? Explain

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(b) Does it provide for acceptance of students' views on issues raised during such discussions lectures? Explain

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(c) Does it allow students to critique information you impart during lectures? Explain

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8. Do you experience any problems in the teaching of action research?

(a) If yes, explain the problems.

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(b) If not, why not?

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SECTION C

9. (a) Are you satisfied with the activities of action research? (a) If so, what are those activities that are successful?

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- (b) If not, why not?

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- (b) What would you recommend for improvement of action research?

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10. (a) Do you think the student teachers experience any problems practicing action research in schools? If so, please explain the problems.

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- (b) If not, explain

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